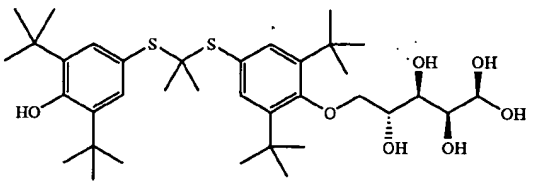
for application to rectal, vaginal, nasal or oral mucosa. In addition to the other materials listed above for systemic administration, thickening Oagents, emollients, and Gil stabilizers can be used to prepare topical compositions. Examples of thickening agents include petrolatum, beeswax, xanthan gum, or polyethylene, humectants such as sorbitol, emollients such as mineral oil, lanolin and its derivatives, or squalene.

[0450] Modifications and variations of the present invention relating to compounds that inhibit the suppression of VCAM-1 and methods of treating diseases mediated by the expression of VCAM-1 will be obvious to those skilled in the art from the foregoing detailed description of the invention. Such modifications and variations are intended to come with the scope of the appended claims.

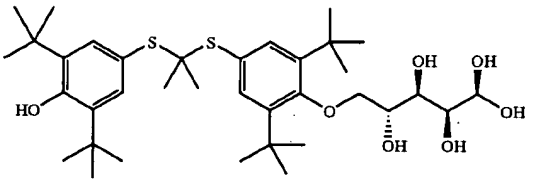
We claim:

1. A compound of the formula



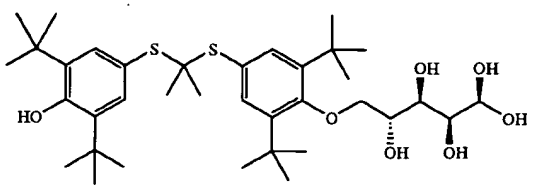
or a pharmaceutically acceptable salt or ester thereof.

2. A compound of the formula



or a pharmaceutically acceptable salt thereof.

3. A pharmaceutical composition comprising a compound of the formula



together with a pharmaceutically acceptable carrier.

4. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for oral administration.

5. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for topical administration.

6. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for intravenous administration.

7. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for subcutaneous administration.

8. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for intraperitoneal administration.

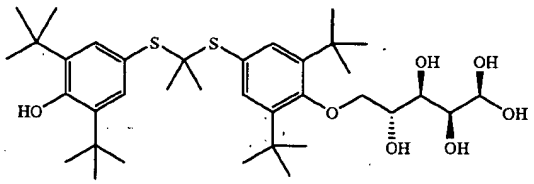
9. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for intramuscular administration.

10. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for submucosal administration.

11. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for inhalation administration.

12. The pharmaceutical composition of claim 3, wherein the pharmaceutically acceptable carrier is suitable for transdermal administration.

13. A method for the treatment of an inflammatory disorder, comprising administering to a host in need thereof an effective treatment amount of a compound of the formula



or a pharmaceutically acceptable salt thereof.

14. The method of claim 13, wherein the inflammatory disorder is arthritis.

15. The method of claim 13, wherein the inflammatory disorder is rheumatoid arthritis.

16. The method of claim 13, wherein the inflammatory disorder is osteoarthritis.

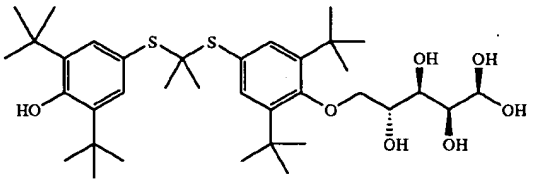
17. The method of claim 13, wherein the inflammatory disorder is asthma.

18. The method of claim 13, wherein the inflammatory disorder is dermatitis.

19. The method of claim 13, wherein the inflammatory disorder is multiple sclerosis.

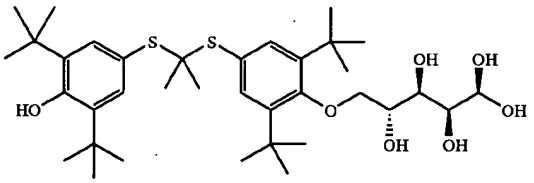
20. The method of claim 13, wherein the inflammatory disorder is psoriasis.

21. A method for the treatment of a disorder mediated by VCAM-1, comprising administering to a host in need thereof an effective treatment amount of a compound of the formula



or a pharmaceutically acceptable salt thereof.

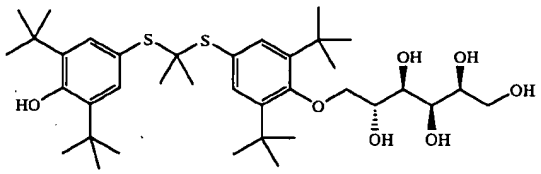
22. A method for the treatment of a cardiovascular disorder, comprising administering to a host in need thereof an effective treatment amount of a compound of the formula



or a pharmaceutically acceptable salt thereof.

23. The method of claim 22, wherein the cardiovascular disorder is selected from the group consisting of atherosclerosis, post-angioplasty restenosis, coronary artery disease, angina and small artery disease.

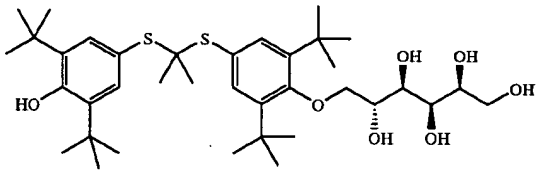
24. A method for suppressing the expression of a redox-sensitive gene or activating a gene that is suppressed through a redox-sensitive pathway, comprising administering to a host in need thereof an effective treatment amount of a compound of the formula



or a pharmaceutically acceptable salt thereof.

25. The method of claim 24, wherein the redox-sensitive gene expresses cytokines.

26. A method of treating an immune response, comprising administering to a host in need thereof an effective treatment amount of a compound of the formula



or a pharmaceutically acceptable salt thereof.

* * * * *

```
=> s alditol/cn
L1            0 ALDITOL/CN

=> s alditol
              8 ALDITOL
              1 ALDITOLS
L2            8 ALDITOL
                (ALDITOL OR ALDITOLS)

=> d scan

L2   8 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   DNA (synthetic Streptomyces strain IKD472 alditol oxidase-specific
     probe) (9CI)
SQL  66
MF   Unspecified
CI   MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L2   8 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   Oxidase, alditol (Streptomyces strain IKD472 N-terminal fragment)
     (9CI)
SQL  240
MF   Unspecified
CI   MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

L2   8 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   Carbohydrates and Sugars, hexitols, anhydro
MF   Unspecified
CI   MAN, CTS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L2   8 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   Oxidase, alditol (Streptomyces strain IKD472) (9CI)
SQL  415
MF   Unspecified
CI   MAN

**RELATED SEQUENCES AVAILABLE WITH SEQLINK**

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

L2   8 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   Oxidase, alditol (9CI)
MF   Unspecified
CI   MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L2   8 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   DNA ( Streptomyces strain IKD472 alditol oxidase gene) (9CI)
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SQL 1245
MF Unspecified
CI MAN

RELATED SEQUENCES AVAILABLE WITH SEQLINK

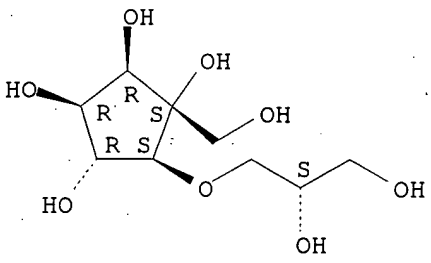
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN **DNA (Streptomyces strain IKD472 alditol oxidase N-terminal fragment-specifying gene) (9CI)**
SQL 720
MF Unspecified
CI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

L2 8 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN 1,2,3,4-Cyclopentanetetrol, 5-[(2S)-2,3-dihydroxypropoxy]-1-(hydroxymethyl)-, (1S,2R,3R,4R,5S)- (9CI)
MF C9 H18 O8

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

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AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514
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JP 2002503227	T2	20020129	JP 1998-549502	19980514
NO 9905544	A	20000110	NO 1999-5544	19991112
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PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9781 W 19980514

OTHER SOURCE(S): MARPAT 130:13646
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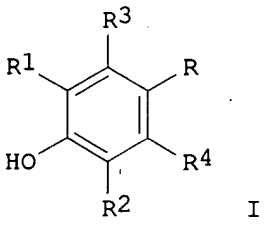

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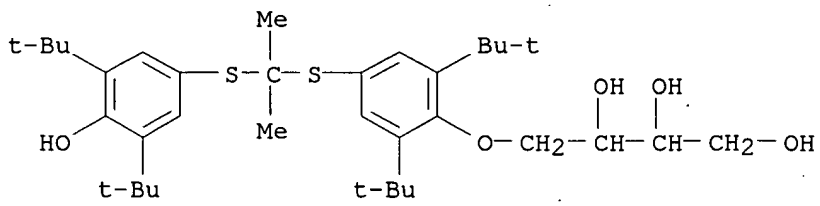

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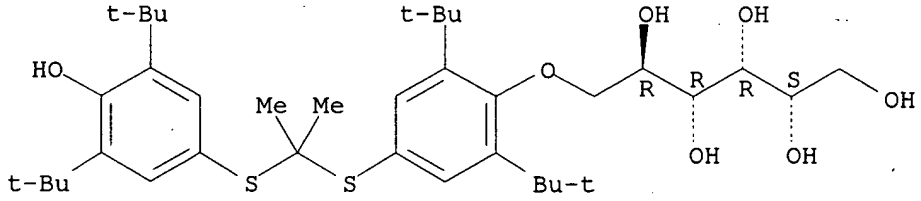
Absolute stereochemistry.



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OTHER SOURCE(S): MARPAT 130:13646
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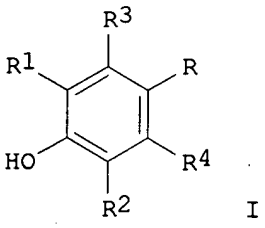

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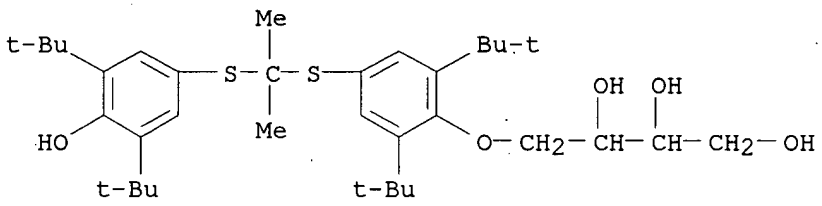

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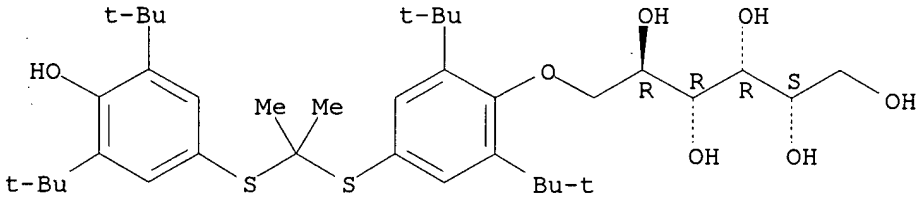
Absolute stereochemistry.



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OTHER SOURCE(S): MARPAT 130:13646
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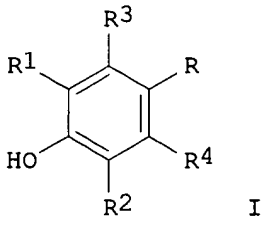

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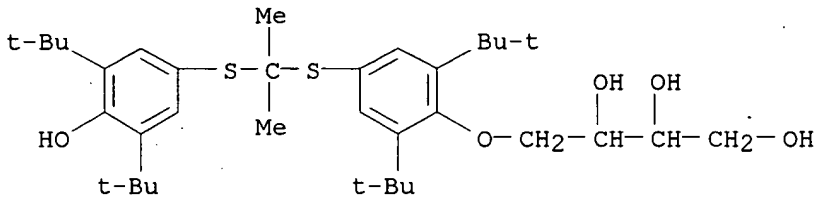

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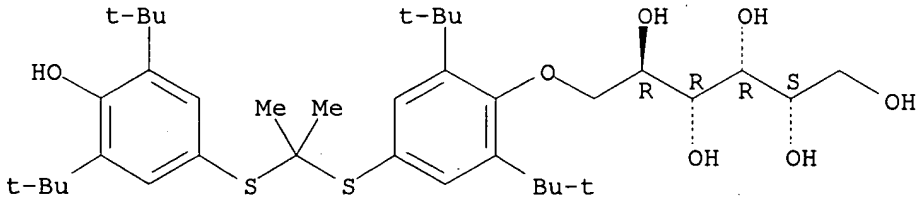
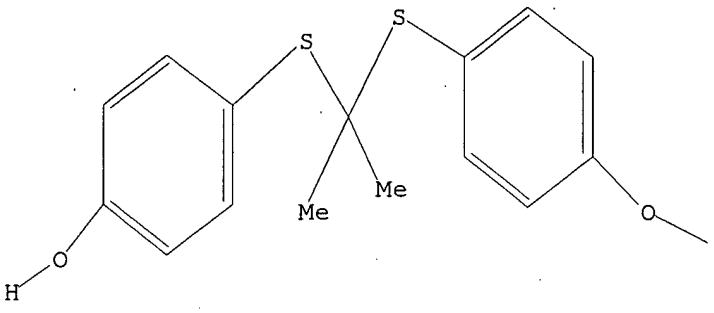
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

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SAMPLE SEARCH INITIATED 11:12:57 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 22 TO ITERATE

100.0% PROCESSED 22 ITERATIONS 7 ANSWERS
SEARCH TIME: 00.00.01

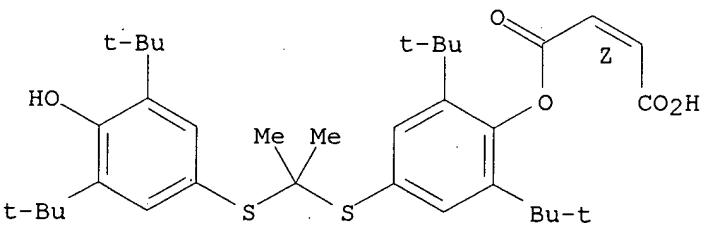
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 159 TO 721
PROJECTED ANSWERS: 7 TO 298

L2 7 SEA SSS SAM L1

=> d scan

L2 7 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN 2-Butenedioic acid (2Z)-, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI)
MF C35 H50 O5 S2

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l1 full
FULL SEARCH INITIATED 11:13:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 456 TO ITERATE

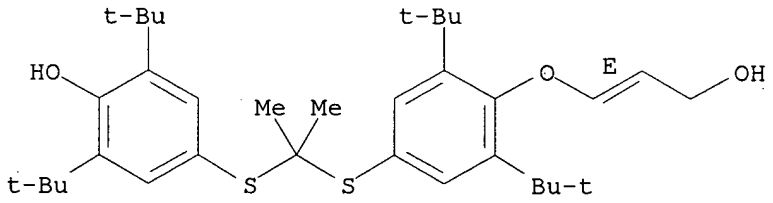
100.0% PROCESSED 456 ITERATIONS 105 ANSWERS
SEARCH TIME: 00.00.01

L3 105 SEA SSS FUL L1

=> d scan

L3 105 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-[[(1E)-3-hydroxy-1-propenyl]oxy]phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)-(9CI)
MF C34 H52 O3 S2

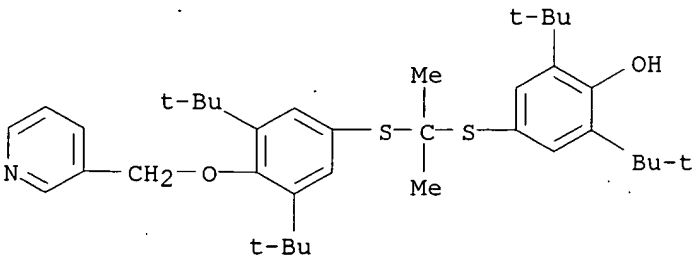
Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

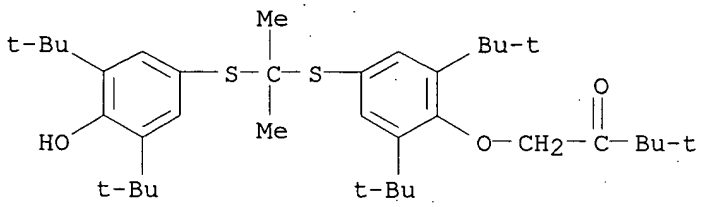
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L3 105 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-pyridinylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI)
MF C37 H53 N O2 S2



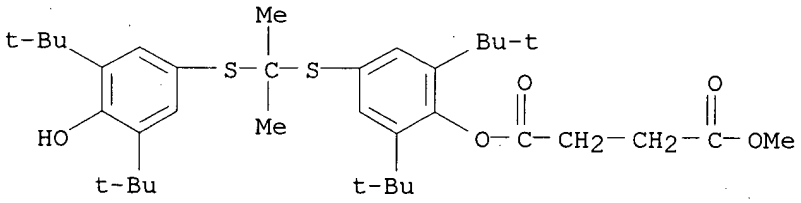
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 105 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN 2-Butanone, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-3,3-dimethyl- (9CI)
MF C37 H58 O3 S2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

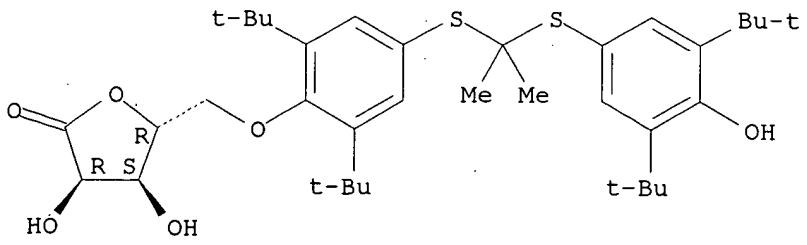
L3 105 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Butanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI)
MF C36 H54 O5 S2



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L3 105 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN D-Ribonic acid, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]-, .gamma.-lactone (9CI)
MF C36 H54 O6 S2

Absolute stereochemistry.



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L6            1 L5

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L6   ANSWER 1 OF 1  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         1991:558965  CAPLUS
DOCUMENT NUMBER:          115:158965
TITLE:                    Preparation of 6-aryloxymethyl-4-
                          hydroxytetrahydropyran-2-ones and the corresponding
                          dihydroxycarboxylic acids and salts as HMG-CoA
                          reductase inhibitors and biological antioxidants
INVENTOR(S):              Jendralla, Heiner; Wess, Guenther; Kesseler, Kurt;
                          Beck, Gerhard
PATENT ASSIGNEE(S):       Hoechst A.-G., Germany
SOURCE:                   Eur. Pat. Appl., 59 pp.
                          CODEN: EPXXDW
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE           APPLICATION NO.   DATE
     ---------------   ----  --------       ---------------   --------
     EP 418648          A1   19910327       EP 1990-117043    19900905
     EP 418648          B1   19950111
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
     DE 3929913         A1   19910404       DE 1989-3929913   19890908
     ES 2067609         T3   19950401       ES 1990-117043    19900905
     US 5294724         A    19940315       US 1990-578240    19900906
     CA 2024849         AA   19910309       CA 1990-2024849   19900907
     CA 2024849         C    20020101
     NO 9003911         A    19910311       NO 1990-3911      19900907
     NO 175002          B    19940509
     NO 175002          C    19940817
     AU 9062277         A1   19910314       AU 1990-62277     19900907
     AU 629977          B2   19921015
     JP 03099075        A2   19910424       JP 1990-235998    19900907
     JP 3053417         B2   20000619
     ZA 9007134         A    19910626       ZA 1990-7134      19900907
     HU 56085           A2   19910729       HU 1990-5827      19900907
     HU 212103          B    19960228
     IL 95599           A1   19990714       IL 1990-95599     19901006
     FI 9603396         A    19960830       FI 1996-3396      19960830
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                                           FI 1990-4395     A  19900906
OTHER SOURCE(S):          MARPAT 115:158965
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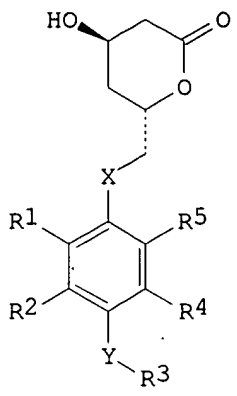

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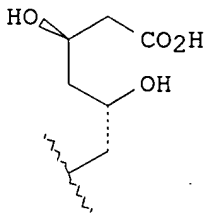

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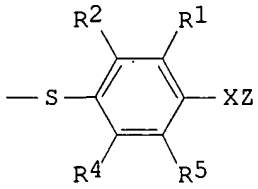

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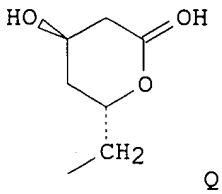

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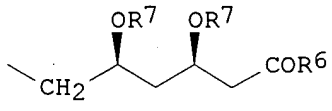


Q2

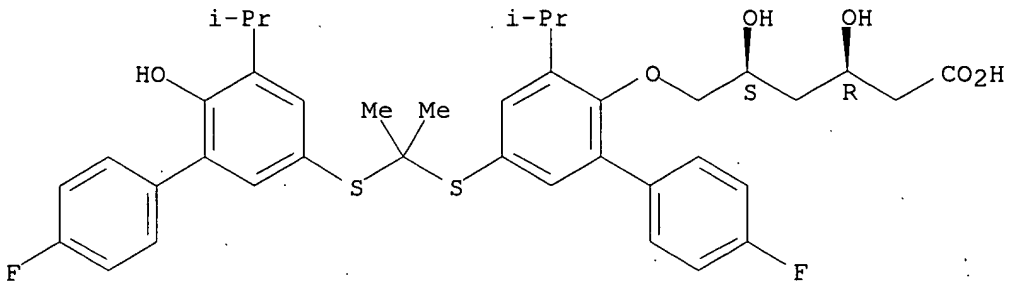
AB Title compds. [I; X, Y = O, S; R1, R5 = Me2CH, cyclopropyl, (un)substituted Ph; R2, R4 = H, Me2CH, cyclopropyl, (un)substituted Ph; R3 = H, Me, Et, C3-8 alkyl optionally substituted by thiophenyl residue Q in which X, R1, R2, R4, R5 are as above, Z = H, pharmaceutically compatible cation, hydroxypyranyl residue Q1, dihydroxyhexanoic acid residue Q2 (R6 = OH, R7 = H), C3-8 cycloalkyl, (un)substituted Ph, acetyl (when Y = O)], open chain carboxylic acid forms (II; R1-R5, X, Y as defined) and their pharmaceutically compatible esters or salts with bases, useful as antihypercholesteremics and for the prophylaxis and treatment of arteriosclerosis, were prepd. Reaction of 2-(p-fluorophenyl)-4-isothiocyanato-6-isopropylphenol (prepn. given) with 4-FC6H4MgBr gave 100% phenylthiophenol deriv. which underwent a substitution reaction (74.0%) with 6-mesyloxydihydroxyhexanoate tert-Bu ester acetonide Q2OSO2Me (R6 = CMe3, R7R7 = CMe2). The product was deprotected (80.8%) and sapond. to give 93% the title compd. 3(R),5(S)-dihydroxy-6-[2-p-fluorophenyl-4-p-fluorophenylthio-6-isopropyl)phenoxy]hexanoate Na salt (III). The latter in vitro inhibited rat liver microsomal HMG CoA reductase with IC50 of 6 .times. 10-9 M, vs. 8 .times. 10-9 M for mevinolin Na salt.

IT **136315-18-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as HMG-CoA reductase inhibitor and biol. antioxidant)

RN 136315-18-9 CAPLUS

CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-, sodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.



●x Na

IT Antioxidants
(biol., (aryloxymethyl)hydroxypyranones)
IT Anticholesteremics and Hypolipemics
(hydroxytetrahydropyranones)
IT Arteriosclerosis
(treatment and prophylaxis of, prepn. of (aryloxymethyl)hydroxytetrahydropyranones for)
IT 100-18-5, 1,4-Diisopropylbenzene
RL: RCT (Reactant); RACT (Reactant or reagent)
(acetylation of)
IT 51437-00-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(arylation by, of bromo(isopropyl)phenol, in prepn. of drug)
IT 460-00-4, p-Bromofluorobenzene
RL: RCT (Reactant); RACT (Reactant or reagent)
(arylation by, of isopropylphenol, in prepn. of drug)
IT 129976-32-5, 2-Bromo-6-isopropylphenol
RL: RCT (Reactant); RACT (Reactant or reagent)
(arylation of, by bromofluorobenzene deriv., in prepn. of drug)
IT 10292-60-1, o-Cyclopropylphenol
RL: RCT (Reactant); RACT (Reactant or reagent)
(bromination of)
IT 88-69-7, o-Isopropylphenol
RL: RCT (Reactant); RACT (Reactant or reagent)
(bromination of, in prepn. of drug)
IT 541-41-3, Ethyl chloroformate
RL: RCT (Reactant); RACT (Reactant or reagent)
(esterification by, and lactonization, of hexanoic acid deriv.)
IT 67-63-0, 2-Propanol, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(etherification by, of thiocyanatophenol deriv.)
IT 136007-98-2P 136007-99-3P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in acetylation of triisopropyl hydroquinone deriv.)
IT 136216-06-3P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in deprotection of (isopropylidenethio)bisfluorophenylbenzene deriv.)
IT 136216-04-1P 136216-05-2P
RL: FORM (Formation, nonpreparative); PREP (Preparation)
(formation of, in substitution reaction of fluorophenylphenol deriv. by mesyl dihydrohexanoate ester deriv.)
IT 9028-35-7, HMG-CoA reductase
RL: USES (Uses)
(inhibitors, prepn. of arylhydroxytetrahydropyranone derivs. as)

IT 131003-19-5P, 2-(p-Fluorophenyl)-3,5,6-triisopropyl-1,4-hydroquinone
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and acetylation of, in prepn. of drug)

IT 129976-32-5P, 2-Bromo-6-isopropylphenol
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and arylation of, by bromofluorobenzene deriv.)

IT 131003-16-2P, 1-Bromo-2,4,5-triisopropylbenzene
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and arylation of, by bromofluorobenzene, in prepn. of drug)

IT 136215-86-6P, 2-Bromo-6-cyclopropylphenol
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and arylation of, with bromofluorobenzene)

IT 136215-94-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and bromination of, in prepn. of drug)

IT 136215-91-3P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion of, to phenylthio deriv)

IT 136215-88-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and conversion of, to phenylthio deriv, in prepn. of drug)

IT 136215-93-5P, 1-(2-Hydroxy-2-propyl)-2,5-diisopropylbenzene
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and dehydration of, in prepn. of drug)

IT 948-32-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and dehydrogenation of)

IT 136006-85-4P 136006-86-5P 136006-87-6P 136034-10-1P 136215-95-7P
136215-96-8P 136215-98-0P 136216-00-7P 136216-02-9P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection of, in prepn. of drug)

IT 136315-22-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and lactonization of, in prepn. of drug)

IT 131003-17-3P, 1-(p-Fluorophenyl)-2,4,5-triisopropylbenzene
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and oxidn. of, in prepn. of drug)

IT 77344-62-8P, 1-Acetyl-2,5-diisopropylbenzene
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and reaction of, with methylmagnesium iodide)

IT 131003-18-4P, 2-(p-Fluorophenyl)-3,5,6-triisopropyl-1,4-benzoquinone
131003-20-8P, 2-(p-Fluorophenyl)-4-thiocyanato-6-isopropylphenol
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and redn. of, in prepn. of drug)

IT 135054-68-1P 135054-70-5P 136006-89-8P 136006-90-1P 136006-91-2P
136006-92-3P 136215-97-9P 136215-99-1P 136216-01-8P 136216-03-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and sapon. of, in prepn. of drug)

IT 131003-22-0P 136249-38-2P 136249-39-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and substitution reaction of, with mesyl dihydroxyhexanoate ester)

IT 136007-97-1P, 2,5,6-Triisopropyl-3-(p-fluorophenyl)-4-acetoxyphenol
136215-89-9P 136215-92-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and substitution reaction of, with mesyl dihydroxyhexanoate ester deriv.)

IT 131003-09-3P 136215-90-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thiocyanation of)

IT 136215-87-7P, 2-(p-Fluorophenyl)-6-cyclopropylphenol
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thiocyanation of, in prepn. of drug)

IT 131003-21-9P, 2-(p-Fluorophenyl)-4-mercapto-6-isopropylphenol
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and thioetherification of, by dimethoxypropane, in prepn. of drug)

IT 135054-71-6P 136215-82-2P 136215-83-3P 136215-84-4P 136215-85-5P
136315-18-9P 136315-19-0P 136315-20-3P 136315-21-4P
136316-20-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as HMG-CoA reductase inhibitor and biol. antioxidant)

IT 131003-24-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for antihypercholesteremic/antioxidant)

IT 100-58-3, Phenylmagnesium bromide
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with thiocyanatophenol deriv., in prepn. of drug)

IT 135054-68-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(substitution reaction of, with phenol derivs., in prepn. of HMG-CoA reductase inhibitors and biol. antioxidants)

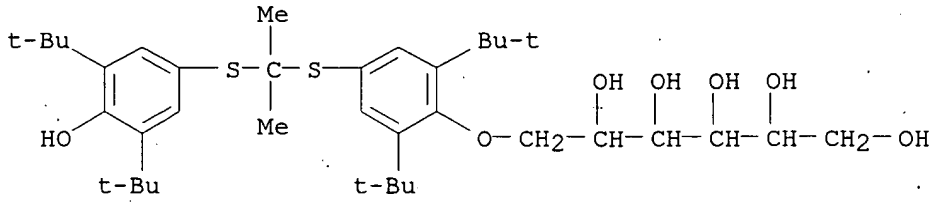
=> s l5 and C37 H60 O7 S2/mf
REG1stRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L8 6 L7

1 3 L3 AND C37 H60 O7 S2/MF

=> d 1-3

L11 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2003 ACS
RN 473427-26-8 REGISTRY
CN Hexitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C37 H60 O7 S2**
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

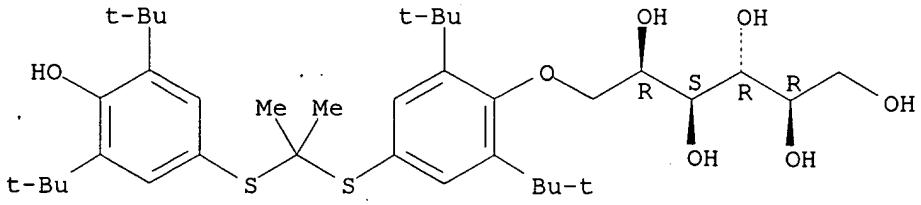


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L11 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2003 ACS
RN 366494-65-7 REGISTRY
CN D-Altritol, 1-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C37 H60 O7 S2**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.



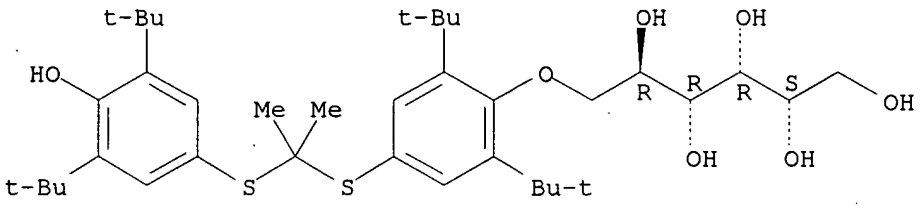
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L11 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2003 ACS
RN 216168-36-4 REGISTRY
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-

1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF **C37 H60 O7 S2**
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	13.88	211.23

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.65

FILE 'CAPLUS' ENTERED AT 11:19:21 ON 25 MAY 2003
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FILE COVERS 1907 - 25 May 2003 VOL 138 ISS 22
FILE LAST UPDATED: 23 May 2003 (20030523/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l11
L12 4 L11

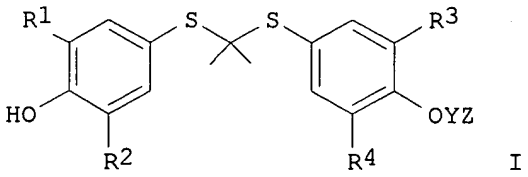
=> d ibib abs hitstr 1-4 it

L12 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:814837 CAPLUS
DOCUMENT NUMBER: 137:320305
TITLE: Probucol derivatives and methods for treating transplant rejection
INVENTOR(S): Edwards, David B.; Somers, Patricia K.; Glass, Mitchell
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 815,262.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002156022	A1	20021024	US 2001-36307	20011025
US 6147250	A	20001114	US 1998-79213	19980514
US 6548699	B1	20030415	US 1999-370046	19990806
US 2002016300	A1	20020207	US 2001-815262	20010321
US 2002177717	A1	20021128	US 2002-60734	20020130
US 2002169215	A1	20021114	US 2002-114346	20020402
US 2002188118	A1	20021212	US 2002-115206	20020402
US 2002193446	A1	20021219	US 2002-114351	20020402

PRIORITY APPLN. INFO.:
US 1997-47020P P 19970514
US 1998-79213 A1 19980514
US 1999-370046 A2 19990806
US 2000-191046P P 20000321
US 2001-815262 A2 20010321

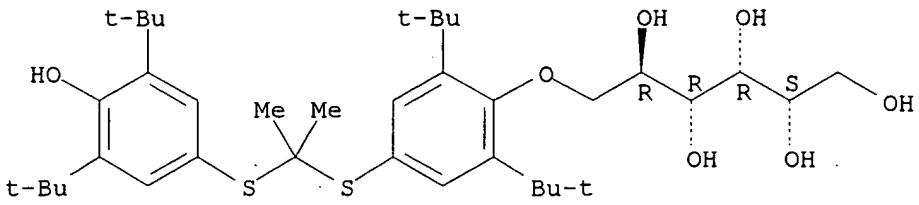
OTHER SOURCE(S): MARPAT 137:320305
GI



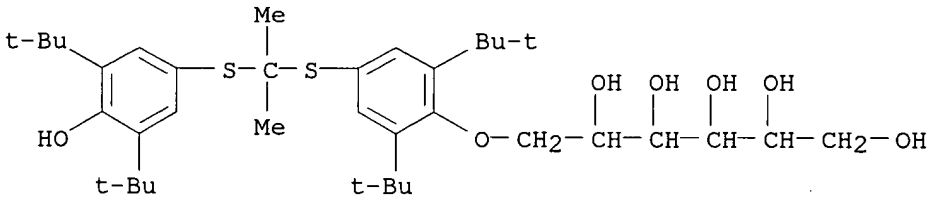
I

AB The invention discloses the use of I [R1-R4 = H, OH, C1-10 alkyl, aryl, heteroaryl, etc.; Y = bond, C(O); Z = C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, etc.], and pharmaceutically acceptable salts thereof, alone or in combination, for the treatment of transplant rejection. Prepn. of I [R1-R4 = tert-butyl; YZ = (CH2)3COOH] from probucol which was evaluated in a graft arteriopathy model and Me 4-chlorobutyrate is described.
IT **216168-36-4 473427-26-8**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol derivs. for treatment of transplant rejection)
RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 473427-26-8 CAPLUS
CN Hexitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)



IT Transplant and Transplantation
(allotransplant, aorta; probucol derivs. for treatment of transplant rejection)
IT Artery
(aorta, allotransplant; probucol derivs. for treatment of transplant rejection)
IT Arteriosclerosis
Cell proliferation
Cytotoxic agents
Immunosuppressants
Transplant and Transplantation
Transplant rejection
(probucol derivs. for treatment of transplant rejection)
IT Steroids, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol derivs. for treatment of transplant rejection)
IT Blood vessel
(smooth muscle; probucol derivs. for treatment of transplant rejection)
IT 216167-95-2P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(probucol derivs. for treatment of transplant rejection)
IT 59-05-2, Methotrexate 446-86-6, Azathioprine 24280-93-1, Mycophenolic acid 53123-88-9, Sirolimus 79217-60-0, Cyclosporin 104987-11-3, Tacrolimus 128794-94-5, Mycophenolate mofetil 159351-69-6, Everolimus 216167-82-7 216167-86-1 216167-92-9 216167-93-0 216167-94-1 216168-01-3 216168-28-4 **216168-36-4** 260370-57-8, NOX-100 366494-64-6 **473427-26-8** 473427-29-1
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol derivs. for treatment of transplant rejection)

IT 3153-37-5, Methyl 4-chlorobutyrate 23288-49-5, Probucol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; probucol derivs. for treatment of transplant rejection)

L12 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:762965 CAPLUS
DOCUMENT NUMBER: 135:303678
TITLE: Preparation of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality.
INVENTOR(S): Luchoomun, Jayraz; Meng, Charles Q.; Saxena, Uday
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001077072	A2	20011018	WO 2001-US11899	20010411
WO 2001077072	A3	20020718		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 2002016364	A1	20020207	US 2001-833407	20010411
EP 1272465	A2	20030108	EP 2001-926894	20010411
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-196201P P 20000411
WO 2001-US11899 W 20010411

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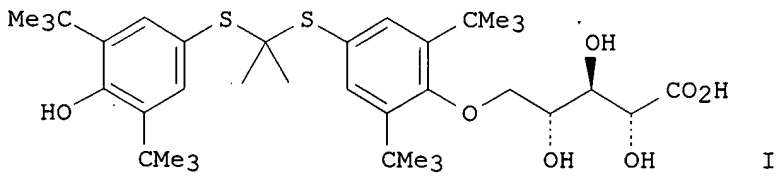


I

AB Title compds., e.g. (I), were prepd. Thus, D-ribonic acid .gamma.-lactone was refluxed 16 h with tri-Et orthoformate in THF to give a residue which was refluxed with probucol, Ph3P, and di-Et azodicarboxylate in THF to give a residue which in turn was refluxed with HOAc/MeOH/H2O to give a residue which was stirred with aq. NaOH in THF to give I. I at 150 mg/kg/day gave a 30% increase in HDL cholesterol levels in hypercholesterolemic hamsters. Title compds. may also improve HDL functionality by (a) increasing clearance of cholesteryl esters, (b) increasing HDL-particle affinity for hepatic cell surface receptors or (c) increasing the half life of apoAI-HDL.

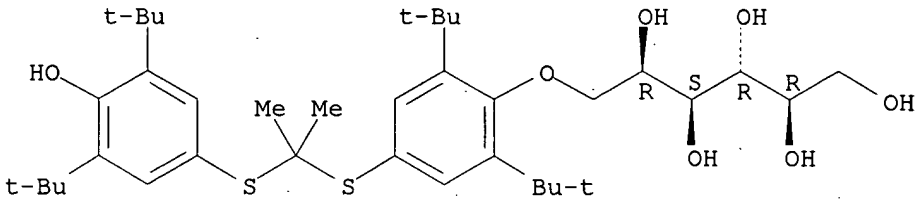
IT **366494-65-7**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

RN 366494-65-7 CAPLUS

CN D-Altritol, 1-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(A-I, apoAI-HDL half life increase; prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); MSC (Miscellaneous); BIOL (Biological study); PROC (Process)
(high-d.; prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

IT 23288-49-5DP, Probucol, monoethers 268738-49-4P 366494-61-3P 366494-62-4P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

IT 216168-00-2 216168-35-3 **366494-65-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

IT 2478-10-6, 4-Hydroxybutyl acrylate 5336-08-3, D-Ribonic acid .gamma.-lactone 23288-49-5, Probucol
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

IT 78508-93-7P 216168-29-5P 216168-30-8P 366494-63-5P 366494-64-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of probucol monoethers which increase plasma HDL cholesterol levels and which improve HDL functionality)

L12 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:335659 CAPLUS
DOCUMENT NUMBER: 132:343330
TITLE: Methods and compositions to lower plasma cholesterol levels

INVENTOR(S): Medford, Russell M.; Saxena, Uday
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028332	A1	20000518	WO 1999-US26519	19991109
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1137948	A1	20011004	EP 1999-962732	19991109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002529740	T2	20020910	JP 2000-581459	19991109

PRIORITY APPLN. INFO.: US 1998-107644P P 19981109
WO 1999-US26519 W 19991109

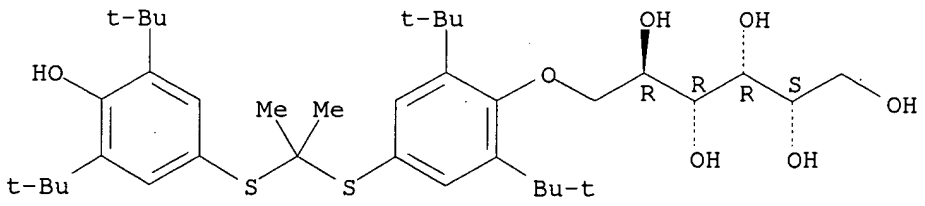
AB A method for detg. whether a compd. binds to a lipoprotein, e.g. LDL or VLDL, in a manner which will lower plasma cholesterol is provided that includes assessing the ability of the compd. to form a complex with the lipoprotein, e.g., LDL or VLDL, and then detg. whether the newly formed complex causes a change in the structure of apoB-100 that results in increased binding affinity to the LDL receptor. Also disclosed is a method for lowering cholesterol in a host in need thereof, including a human, that includes the administration of an effective amt. of a compd. which binds to cholesterol-carrying lipoprotein (e.g. LDL or VLDL) in a manner that alters the three dimensional configuration of the lipoprotein and increases the binding affinity of the apoB-100 protein to the LDL receptor, including those on the surface of a hepatic cell.

IT **216168-36-4**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. to lower plasma cholesterol levels)

RN 216168-36-4 CAPLUS

CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT Apolipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(B-100; methods and compns. to lower plasma cholesterol levels)
IT Animal cell line
(Hep G2; methods and compns. to lower plasma cholesterol levels)
IT Liver
(LDL receptor of; methods and compns. to lower plasma cholesterol levels)
IT Lipoprotein receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(LDL; methods and compns. to lower plasma cholesterol levels)
IT Electrophoresis
(agarose; methods and compns. to lower plasma cholesterol levels)
IT Phenotypes
(apoB-100; methods and compns. to lower plasma cholesterol levels)
IT Sequestering agents
(bile acid; methods and compns. to lower plasma cholesterol levels)
IT Immunoassay
(enzyme-linked immunosorbent assay, sandwich; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(high-d.; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(intermediate-d.; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(low-d.; methods and compns. to lower plasma cholesterol levels)
IT Anticholesteremic agents
Drug screening
Epitopes
Molecular association
(methods and compns. to lower plasma cholesterol levels)
IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(monoclonal; methods and compns. to lower plasma cholesterol levels)
IT Conformation
(protein; methods and compns. to lower plasma cholesterol levels)
IT Immunoassay
(sandwich; methods and compns. to lower plasma cholesterol levels)
IT Bile acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(sequestrants; methods and compns. to lower plasma cholesterol levels)
IT Drugs
(statins; methods and compns. to lower plasma cholesterol levels)
IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(to apoB-100; methods and compns. to lower plasma cholesterol levels)
IT Biological transport
(uptake, LDL; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(very-low-d.; methods and compns. to lower plasma cholesterol levels)
IT 9012-36-6, Agarose
RL: ARU (Analytical role, unclassified); ANST (Analytical study)

(electrophoresis; methods and compns. to lower plasma cholesterol levels)

IT 59-67-6, Nicotinic acid, biological studies 943-45-3D, Fibric acid, derivs. 1404-04-2, Neomycin 11041-12-6, Cholestyramine 23288-49-5, Probucol 25769-03-3, 1-Pyrrolidinecarbodithioic acid 216167-66-7
216167-67-8 216167-69-0 216167-74-7 216167-82-7 216167-84-9
216167-91-8 216167-93-0 216167-94-1 216167-95-2 216168-35-3
216168-36-4 216168-42-2 216168-49-9 268738-42-7
268738-43-8 268738-44-9 268738-45-0 268738-46-1 268738-47-2
268738-48-3 268738-49-4 268738-50-7 268738-51-8 268738-52-9
268738-53-0 268738-54-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. to lower plasma cholesterol levels)

IT 57-88-5, Cholesterol, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(methods and compns. to lower plasma cholesterol levels)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874851	A1	19981208	AU 1998-74851	19980514
AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6121319	A	20000919	US 1998-78935	19980514
BR 9809819	A	20010918	BR 1998-9819	19980514
JP 2002503227	T2	20020129	JP 1998-549502	19980514
NO 9905544	A	20000110	NO 1999-5544	19991112
MX 9910402	A	20000630	MX 1999-10402	19991112

PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9781 W 19980514

OTHER SOURCE(S): MARPAT 130:13646

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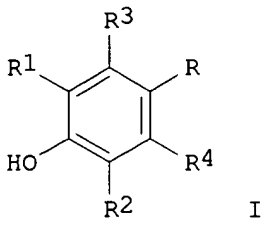


I

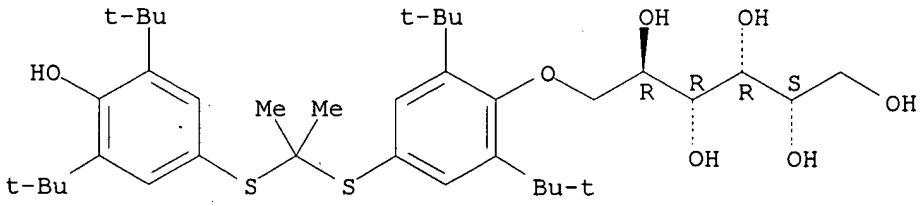
AB Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SO0-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepd. Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

IT **216168-36-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

RN 216168-36-4 CAPLUS

CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(VCAM-1, mediated disorders; treatment; prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT Anti-inflammatory agents
Cardiovascular agents
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT 54622-24-1P 123787-53-1P 141896-35-7P 216167-62-3P 216167-63-4P
216167-64-5P 216167-65-6P 216167-66-7P 216167-67-8P 216167-68-9P
216167-69-0P 216167-70-3P 216167-71-4P 216167-72-5P 216167-73-6P
216167-74-7P 216167-75-8P 216167-76-9P 216167-77-0P 216167-78-1P
216167-79-2P 216167-80-5P 216167-81-6P 216167-82-7P 216167-83-8P
216167-84-9P 216167-85-0P 216167-86-1P 216167-88-3P 216167-89-4P
216167-90-7P 216167-91-8P 216167-92-9P 216167-93-0P 216167-94-1P

216167-95-2P 216167-96-3P 216167-97-4P 216167-98-5P 216167-99-6P
216168-00-2P 216168-01-3P 216168-02-4P 216168-03-5P 216168-05-7P
216168-07-9P 216168-10-4P 216168-12-6P 216168-14-8P 216168-16-0P
216168-18-2P 216168-20-6P 216168-22-8P 216168-24-0P 216168-26-2P
216168-27-3P 216168-28-4P 216168-29-5P 216168-30-8P 216168-31-9P
216168-32-0P 216168-33-1P 216168-34-2P 216168-35-3P
216168-36-4P 216168-37-5P 216168-38-6P 216168-39-7P
216168-40-0P 216168-41-1P 216168-42-2P 216168-43-3P 216168-44-4P
216168-45-5P 216168-46-6P 216168-47-7P 216168-48-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT 74-79-3, L-Arginine, reactions 100-11-8, 4-Nitrobenzyl bromide 104-81-4, 4-Methylbenzyl bromide 108-30-5, Succinic anhydride, reactions 108-55-4, Glutaric anhydride 402-49-3, 4-Trifluoromethylbenzyl bromide 459-46-1, 4-Fluorobenzyl bromide 556-52-5, Oxiranemethanol 610-57-1, 2,4-Dinitrobenzyl chloride 619-23-8, 3-Nitrobenzyl chloride 623-47-2, Ethyl propiolate 623-48-3, Ethyl iodoacetate 1118-89-4, L-Glutamic acid diethyl ester hydrochloride 1464-53-5, 1,3-Butadiene diepoxide 1499-17-8, 1,2-Phenylene phosphochloridate 1501-26-4, Methyl 4-chloroformylbutyrate 2144-37-8, Methyl 5-chloromethyl-2-furoate 2478-10-6, 4-Hydroxybutyl acrylate 3145-86-6, 4-Nitrobenzyl iodide 3179-63-3 3446-91-1 4064-06-6, 1,2,3,4-Di-O-isopropylidene-D-galactopyranose 5394-18-3, N-(4-Bromobutyl)phthalimide 5407-04-5 6780-38-7 13100-46-4, 1,2,3,4-Tetra-O-acetyl-.beta.-D-glucopyranose 13737-36-5 14273-85-9, Methyl 4-iodobutyrate 15433-79-1, 5-(Dimethylaminomethyl)-2-furanmethanol 15445-34-8, Lysine methyl ester hydrochloride 17347-61-4, 2,2-Dimethylsuccinic anhydride 18997-19-8, Chloromethyl pivalate 20264-96-4 20395-28-2, 5-Chloropentyl acetate 23288-49-5, Probucol 25084-14-4, 5-Nitro-2-furoyl chloride 39720-27-9, 4-Chloromethylphenyl acetate 50438-75-0, Benzeneethanol, 4-Dimethylamino- 73384-82-4, 3-Bromo-1-propanesulfonic acid 216168-64-8 216168-65-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT 950-59-4P 216168-49-9P 216168-52-4P 216168-53-5P 216168-54-6P 216168-55-7P 216168-57-9P 216168-58-0P 216168-59-1P 216168-60-4P 216168-61-5P 216168-62-6P 216168-63-7P 216168-66-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.45	232.68

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-2.60	-3.25

FILE 'REGISTRY' ENTERED AT 11:22:09 ON 25 MAY 2003

Property values tagged with IC are from the ZIC/VINITI data file

provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAY 2003 HIGHEST RN 519387-75-8
DICTIONARY FILE UPDATES: 23 MAY 2003 HIGHEST RN 519387-75-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

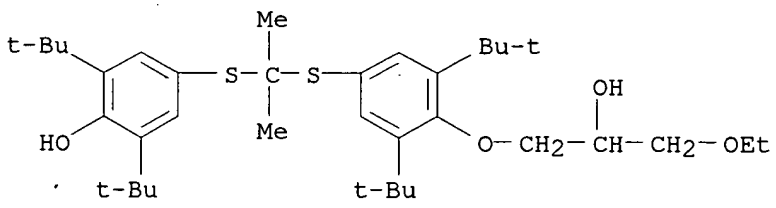
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> s l3 and C36 H58 O4 S2/mf
9 C36 H58 O4 S2/MF
L13 1 L3 AND C36 H58 O4 S2/MF

=> d

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2003 ACS
RN 216168-02-4 REGISTRY
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-ethoxy-2-hydroxypropoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF **C36 H58 O4 S2**
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
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CA SUBSCRIBER PRICE	0.00	-3.25

FILE 'CAPLUS' ENTERED AT 11:24:33 ON 25 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 25 May 2003 VOL 138 ISS 22
FILE LAST UPDATED: 23 May 2003 (20030523/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l13
L14 1 L13

=> d ibib abs hitstr

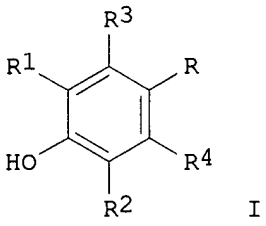
L14 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874851	A1	19981208	AU 1998-74851	19980514
AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6121319	A	20000919	US 1998-78935	19980514
BR 9809819	A	20010918	BR 1998-9819	19980514
JP 2002503227	T2	20020129	JP 1998-549502	19980514
NO 9905544	A	20000110	NO 1999-5544	19991112
MX 9910402	A	20000630	MX 1999-10402	19991112

PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9781 W 19980514

OTHER SOURCE(S): MARPAT 130:13646

GI



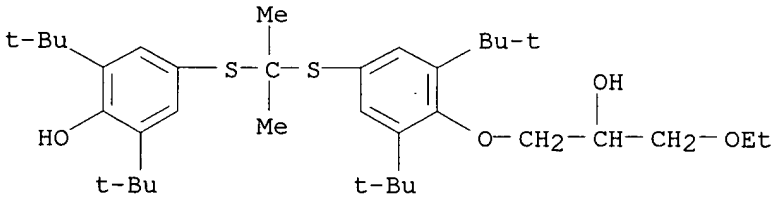
I

AB Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SO0-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepd. Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

IT **216168-02-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

RN 216168-02-4 CAPLUS

CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-ethoxy-2-hydroxypropoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



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REG1stRY INITIATED

Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L16 6 L15

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            14 L3
L17          5 L3 AND L16

=> d ibib abs hitstr 1-5 it

L17  ANSWER 1 OF 5  CAPLUS  COPYRIGHT 2003 ACS
ACCESSION NUMBER:         2002:849415  CAPLUS
DOCUMENT NUMBER:          137:333157
TITLE:                    Probucol monoesters for increasing levels and
                          improving functionality of plasma HDL cholesterol
INVENTOR(S):              Luchoomun, Jayraz; Saxena, Uday; Sundell, Cynthia L.;
                          Sikorski, James A.
PATENT ASSIGNEE(S):       Atherogenics, Inc., USA
SOURCE:                   PCT Int. Appl., 161 pp.
                          CODEN: PIXXD2
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.        KIND  DATE          APPLICATION NO.  DATE
     ---------------   ----  --------      ---------------  --------
     WO 2002087556      A2   20021107      WO 2002-US12678  20020411
     WO 2002087556      A3   20030206
     WO 2002087556      C2   20030320
         W:  AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
             TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,
             CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,
             BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
     US 2003064967      A1   20030403      US 2002-122516   20020411
PRIORITY APPLN. INFO.:                    US 2001-283376P  P  20010411
                                          US 2001-345025P  P  20011109
OTHER SOURCE(S):          MARPAT 137:333157
AB   It has been discovered that certain selected probucol monoesters, and
     their pharmaceutically acceptable salts or prodrugs, are useful for
     increasing circulating HDL cholesterol. These compds. may also improve
     HDL functionality by (a) increasing clearance of cholesteryl esters, (b)
     increasing HDL-particle affinity for hepatic cell surface receptors, or
     (c) increasing the half-life of apoAI-HDL. The pharmaceutical compns.
     comprise probucol monoesters alone or in combination with other agents,
     e.g, statins, IBAT inhibitors, MTP inhibitors, cholesterol absorption
     inhibitors, phytosterols, CETP inhibitors, fibric acid derivs., and
     antihypertensive agents. For example, mono[4-[[1-[[3,5-bis(1,1-
     dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-
     dimethylethyl)phenyl]ester of pentanedioic acid, prepd. from probucol and
     glutaric anhydride, elevated HDLc in hyperlipidemic hamster by 22% (av. of
     3 expts., range 5-44%), compared to untreated controls after 2 wk
     treatment at a dose of 150 mg/kg/day. LDLc was reduced by 29% on av.,
     VLDL cholesterol by 42%, and triglycerides by 24%, compared to controls.
     The compd. was well tolerated and all animals gained wt.
IT   216167-88-3
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of probucol monoesters for increasing levels and improving
        functionality of plasma HDL cholesterol)
RN   216167-88-3  CAPLUS
```
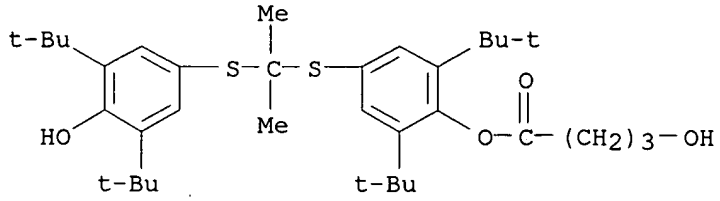
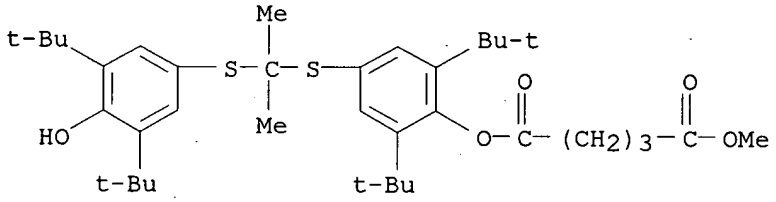

CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

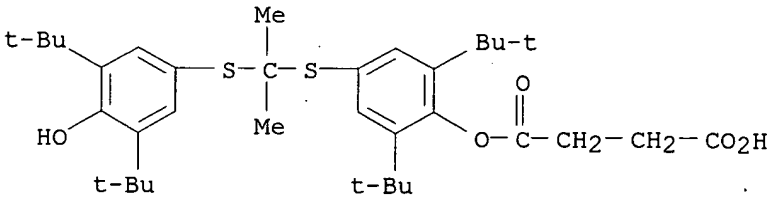


IT **216167-80-5P 216167-82-7P 216167-94-1P 474236-49-2P 474236-50-5P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)

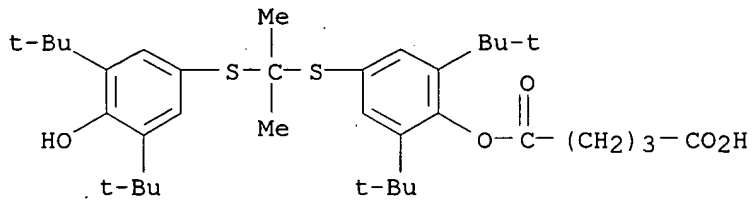
RN 216167-80-5 CAPLUS
CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



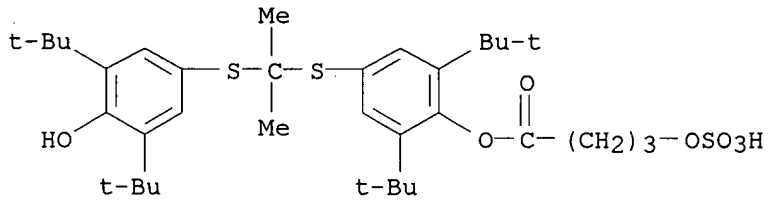
RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



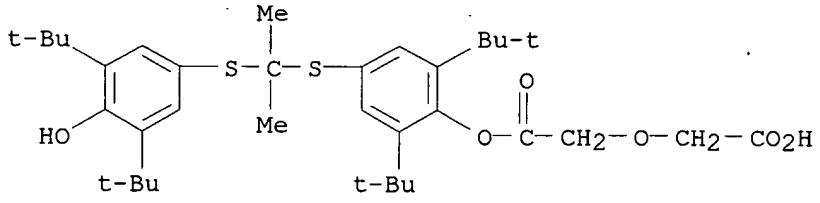
RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 474236-49-2 CAPLUS
CN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester, monosodium salt (9CI) (CA INDEX NAME)



RN 474236-50-5 CAPLUS
CN Acetic acid, [2-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-oxoethoxy]- (9CI) (CA INDEX NAME)



IT Apolipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(A-I; prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)

IT Gene, animal
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(APOAI; prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol and evaluation in animals transfected with human apo-AI gene)

IT Ion channel blockers
(calcium; compns. contg. probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol in combination with other drugs)

IT Drug delivery systems
(compns. contg. probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol alone or in combination with

other drugs)
IT Antihypertensives
Diuretics
Vasodilators
(compns. contg. probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol in combination with other drugs)
IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-d., HDLc; prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)
IT Lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(high-d.; prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)
IT Hamster
(prepn. and evaluation in hamster of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)
IT Mouse
(prepn. and evaluation in mouse of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)
IT Anticholesteremic agents
(prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)
IT Human
(prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol and evaluation in animals transfected with human apo-AI gene)
IT 108-30-5, Succinic anhydride, reactions 108-55-4, Glutaric anhydride 1501-26-4 3162-58-1, Sulfur trioxide trimethylamine 4480-83-5, Diglycolic anhydride 23288-49-5, Probucol **216167-88-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)
IT **216167-80-5P 216167-82-7P 216167-94-1P 474236-49-2P 474236-50-5P**
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)

L17 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:814837 CAPLUS
DOCUMENT NUMBER: 137:320305
TITLE: Probucol derivatives and methods for treating transplant rejection
INVENTOR(S): Edwards, David B.; Somers, Patricia K.; Glass, Mitchell
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 815,262.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002156022	A1	20021024	US 2001-36307	20011025
US 6147250	A	20001114	US 1998-79213	19980514
US 6548699	B1	20030415	US 1999-370046	19990806

US 2002016300	A1	20020207	US 2001-815262		20010321
US 2002177717	A1	20021128	US 2002-60734		20020130
US 2002169215	A1	20021114	US 2002-114346		20020402
US 2002188118	A1	20021212	US 2002-115206		20020402
US 2002193446	A1	20021219	US 2002-114351		20020402
PRIORITY APPLN. INFO.:			US 1997-47020P	P	19970514
			US 1998-79213	A1	19980514
			US 1999-370046	A2	19990806
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			US 2001-815262	A2	20010321

OTHER SOURCE(S): MARPAT 137:320305

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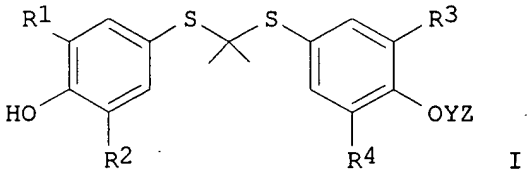


I

AB The invention discloses the use of I [R1-R4 = H, OH, C1-10 alkyl, aryl, heteroaryl, etc.; Y = bond, C(O); Z = C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, etc.], and pharmaceutically acceptable salts thereof, alone or in combination, for the treatment of transplant rejection. Prepn. of I [R1-R4 = tert-butyl; YZ = (CH2)3COOH] from probucol which was evaluated in a graft arteriopathy model and Me 4-chlorobutyrate is described.

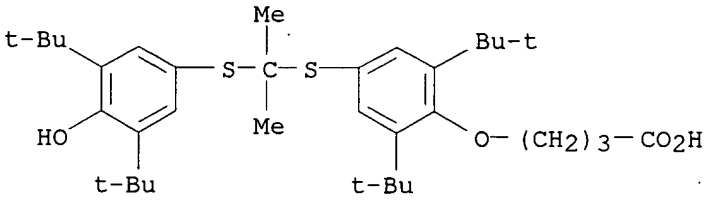
IT **216167-95-2P**

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(probucol derivs. for treatment of transplant rejection)

RN 216167-95-2 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



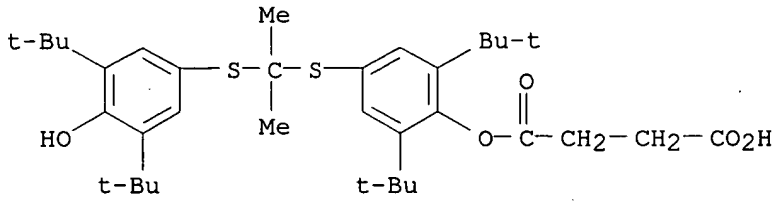
IT **216167-82-7 216167-86-1 216167-92-9 216167-93-0 216167-94-1 216168-01-3 216168-28-4 216168-36-4 366494-64-6 473427-26-8 473427-29-1**

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

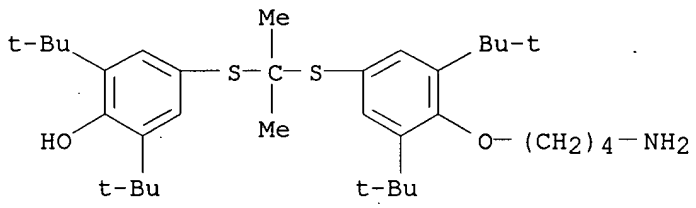
(probucol derivs. for treatment of transplant rejection)

RN 216167-82-7 CAPLUS

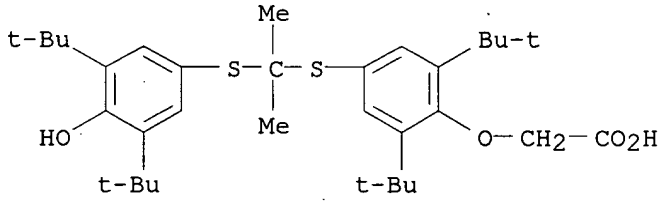
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



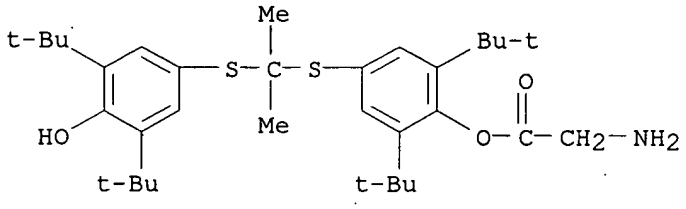
RN 216167-86-1 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 216167-92-9 CAPLUS
CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

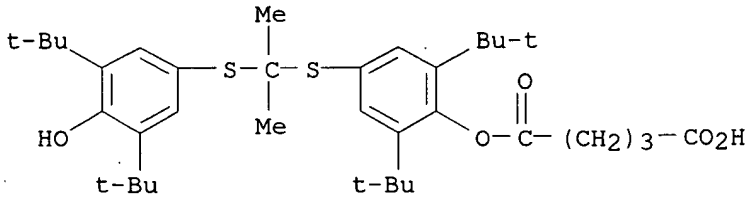


RN 216167-93-0 CAPLUS
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

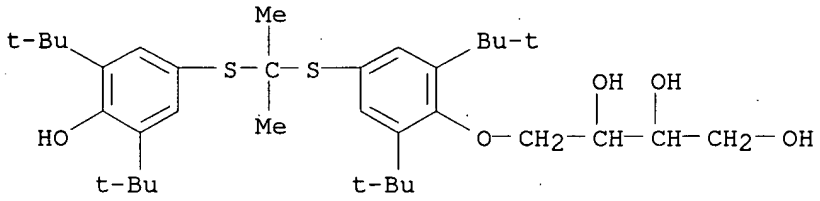


RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]

ester (9CI) (CA INDEX NAME)

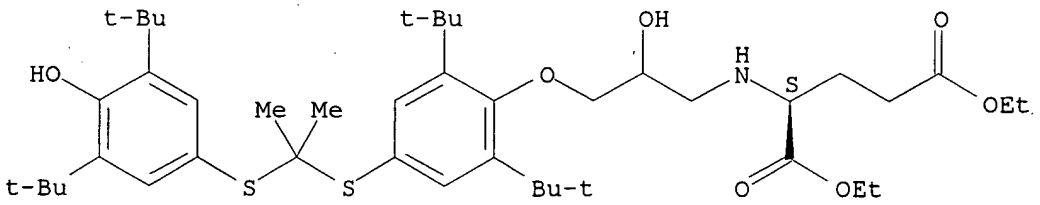


RN 216168-01-3 CAPLUS
CN 1,2,3-Butanetriol, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



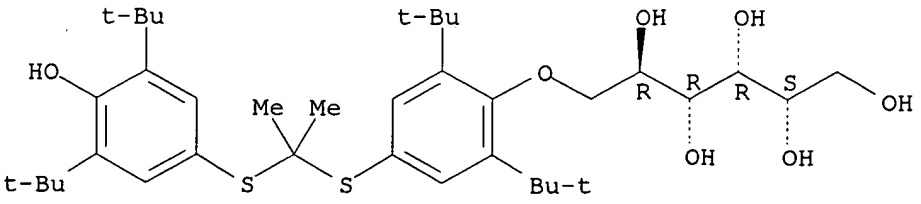
RN 216168-28-4 CAPLUS
CN L-Glutamic acid, N-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



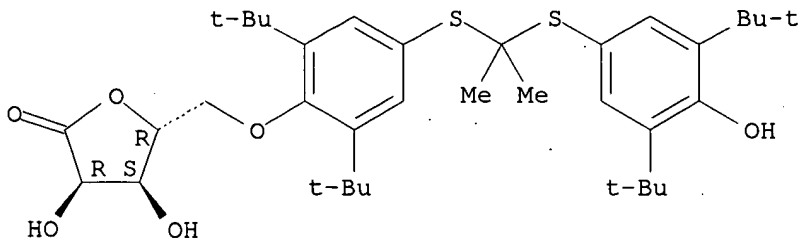
RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

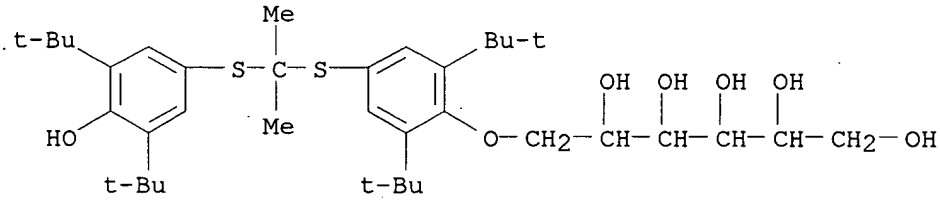


RN 366494-64-6 CAPLUS
CN D-Ribonic acid, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]-, .gamma.-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.

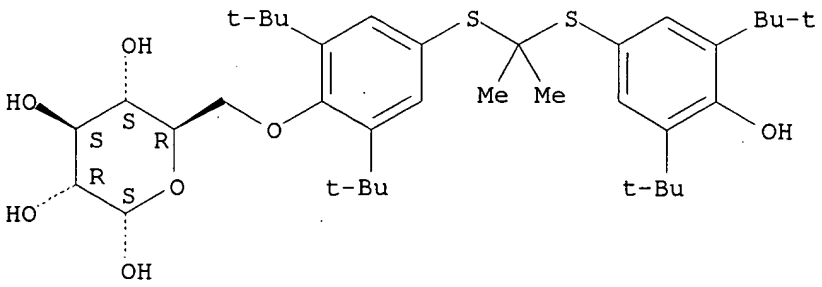


RN 473427-26-8 CAPLUS
CN Hexitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)



RN 473427-29-1 CAPLUS
CN .alpha.-D-Glucopyranose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT Transplant and Transplantation
(allotransplant, aorta; probucol derivs. for treatment of transplant rejection)
IT Artery
(aorta, allotransplant; probucol derivs. for treatment of transplant rejection)
IT Arteriosclerosis

Cell proliferation
Cytotoxic agents
Immunosuppressants
Transplant and Transplantation
Transplant rejection
(probucol derivs. for treatment of transplant rejection)

IT Steroids, biological studies
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol derivs. for treatment of transplant rejection)

IT Blood vessel
(smooth muscle; probucol derivs. for treatment of transplant rejection)

IT **216167-95-2P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(probucol derivs. for treatment of transplant rejection)

IT 59-05-2, Methotrexate 446-86-6, Azathioprine 24280-93-1, Mycophenolic acid 53123-88-9, Sirolimus 79217-60-0, Cyclosporin 104987-11-3, Tacrolimus 128794-94-5, Mycophenolate mofetil 159351-69-6, Everolimus **216167-82-7 216167-86-1 216167-92-9 216167-93-0 216167-94-1 216168-01-3 216168-28-4 216168-36-4** 260370-57-8, NOX-100 **366494-64-6 473427-26-8 473427-29-1**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol derivs. for treatment of transplant rejection)

IT 3153-37-5, Methyl 4-chlorobutyrate 23288-49-5, Probucol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; probucol derivs. for treatment of transplant rejection)

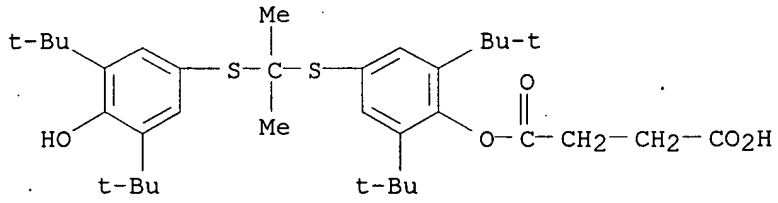
L17 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:641096 CAPLUS
DOCUMENT NUMBER: 138:313884
TITLE: Novel phenolic antioxidants as multifunctional inhibitors of inducible VCAM-1 expression for use in atherosclerosis
AUTHOR(S): Meng, Charles Q.; Somers, Patricia K.; Rachita, Carolyn L.; Holt, Lisa A.; Hoong, Lee K.; Zheng, X. Sharon; Simpson, Jacob E.; Hill, Russell R.; Olliff, Lynda K.; Kunsch, Charles; Sundell, Cynthia L.; Parthasarathy, Sampath; Saxena, Uday; Sikorski, James A.; Wasserman, Martin A.
CORPORATE SOURCE: AtheroGenics, Inc., Alpharetta, GA, 30004, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(18), 2545-2548
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of novel phenolic compds. has been discovered as potent inhibitors of TNF-.alpha.-inducible expression of vascular cell adhesion mol.-1 (VCAM-1) with concurrent antioxidant and lipid-modulating properties. Optimization of these multifunctional agents led to the identification of AGI-1067 as a clin. candidate with demonstrated efficacies in animal models of atherosclerosis and hyperlipidemia.

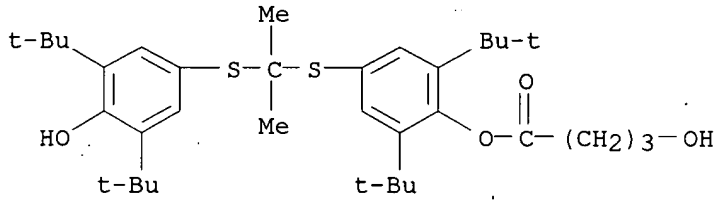
IT **216167-82-7**, AGI-1067 **216167-88-3 216167-94-1 216168-38-6 216168-43-3 219773-27-0 474236-50-5 512790-96-4 512790-97-5 512790-98-6 512790-99-7 512791-00-3 512791-01-4 512791-02-5 512791-03-6 512791-04-7**

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)

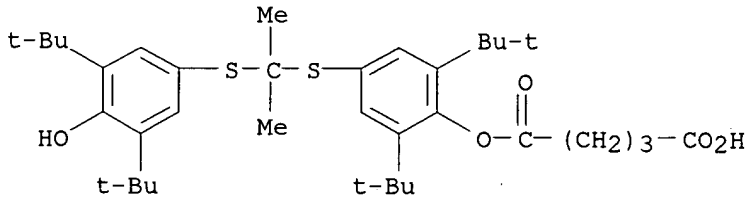
RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



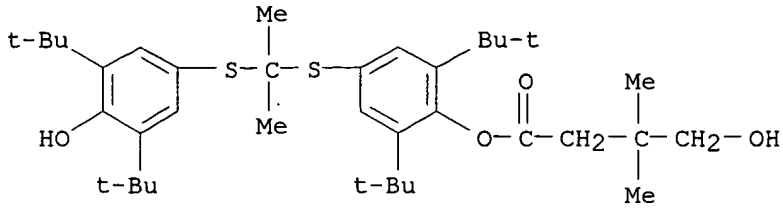
RN 216167-88-3 CAPLUS
CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



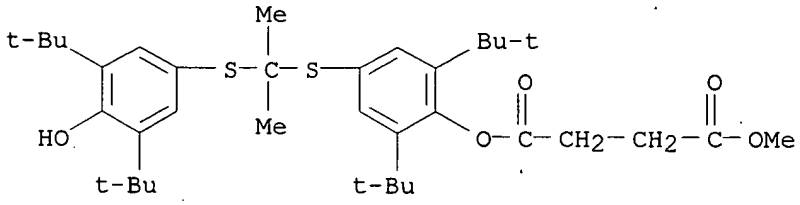
RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



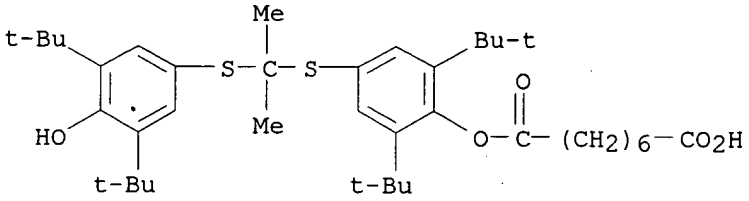
RN 216168-38-6 CAPLUS
CN Butanoic acid, 4-hydroxy-3,3-dimethyl-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



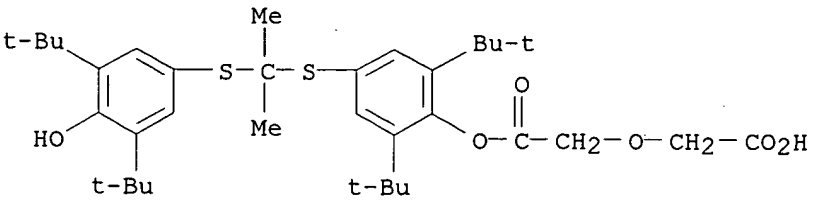
RN 216168-43-3 CAPLUS
CN Butanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



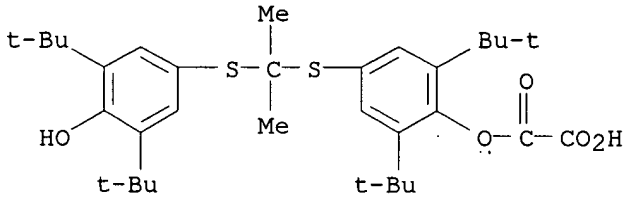
RN 219773-27-0 CAPLUS
CN Octanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 474236-50-5 CAPLUS
CN Acetic acid, [2-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-oxoethoxy]- (9CI) (CA INDEX NAME)

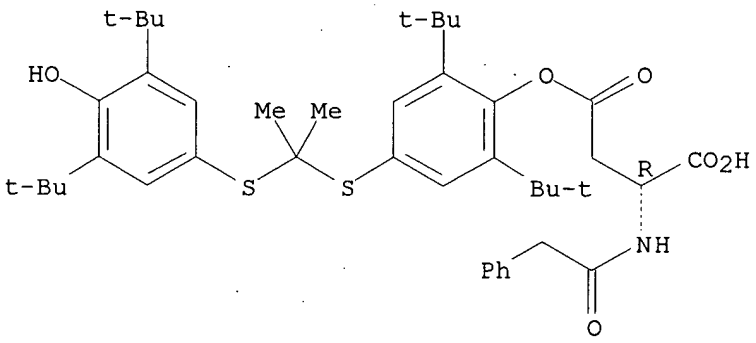


RN 512790-96-4 CAPLUS
CN Ethanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

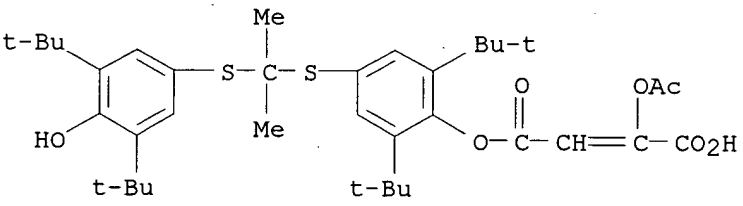


RN 512790-97-5 CAPLUS
CN D-Aspartic acid, N-(phenylacetyl)-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

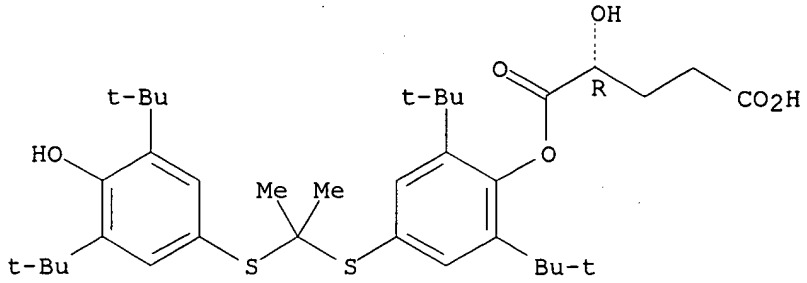


RN 512790-98-6 CAPLUS
CN 2-Butenedioic acid, 2-(acetyloxy)-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

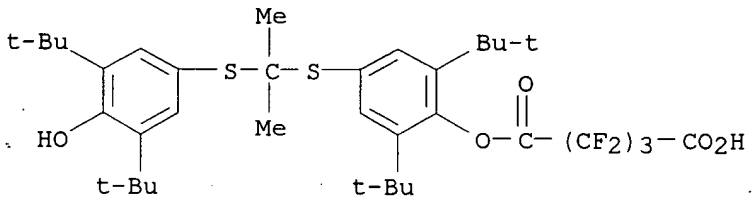


RN 512790-99-7 CAPLUS
CN Pentanedioic acid, 2-hydroxy-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester, (2R)- (9CI) (CA INDEX NAME)

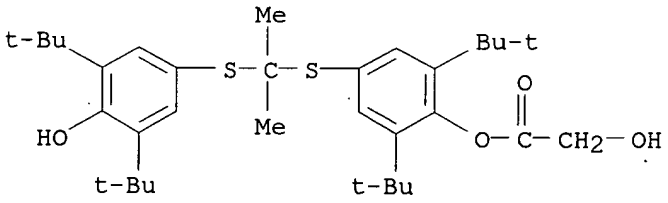
Absolute stereochemistry.



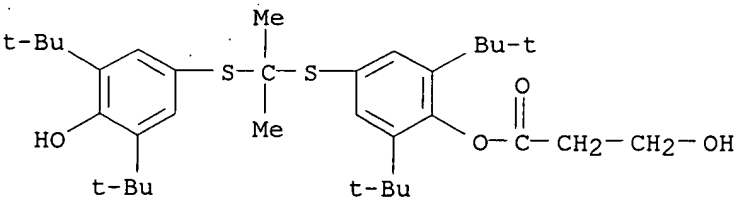
RN 512791-00-3 CAPLUS
CN Pentanedioic acid, hexafluoro-, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 512791-01-4 CAPLUS
CN Acetic acid, hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

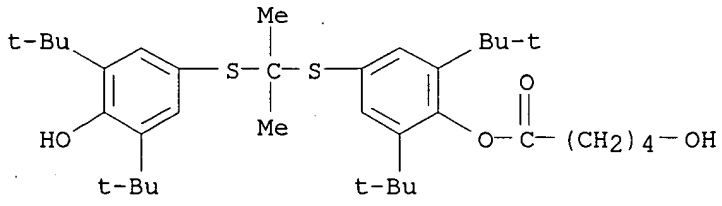


RN 512791-02-5 CAPLUS
CN Propanoic acid, 3-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

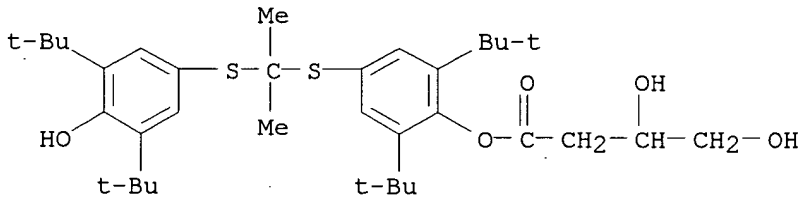


RN 512791-03-6 CAPLUS

CN Pentanoic acid, 5-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



RN 512791-04-7 CAPLUS
CN Butanoic acid, 3,4-dihydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



IT Cell adhesion molecules
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(VCAM-1; phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)
IT Antiarteriosclerotics
(antiatherosclerotics; phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)
IT Lipids, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(hyperlipidemia; phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)
IT Atherosclerosis
Structure-activity relationship
(phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)
IT Antioxidants
(phenolic; phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)
IT **216167-82-7**, AGI-1067 **216167-88-3 216167-94-1**
216168-38-6 216168-43-3 219773-27-0
474236-50-5 512790-96-4 512790-97-5
512790-98-6 512790-99-7 512791-00-3
512791-01-4 512791-02-5 512791-03-6
512791-04-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L17 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:335659 CAPLUS
DOCUMENT NUMBER: 132:343330
TITLE: Methods and compositions to lower plasma cholesterol levels
INVENTOR(S): Medford, Russell M.; Saxena, Uday
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

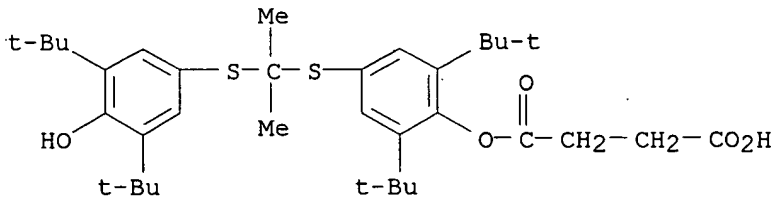
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028332	A1	20000518	WO 1999-US26519	19991109
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1137948	A1	20011004	EP 1999-962732	19991109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002529740	T2	20020910	JP 2000-581459	19991109

PRIORITY APPLN. INFO.: US 1998-107644P P 19981109
WO 1999-US26519 W 19991109

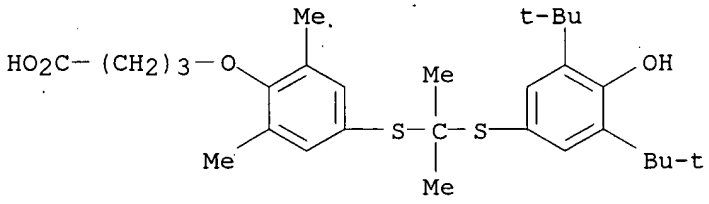
AB A method for detg. whether a compd. binds to a lipoprotein, e.g. LDL or VLDL, in a manner which will lower plasma cholesterol is provided that includes assessing the ability of the compd. to form a complex with the lipoprotein, e.g., LDL or VLDL, and then detg. whether the newly formed complex causes a change in the structure of apoB-100 that results in increased binding affinity to the LDL receptor. Also disclosed is a method for lowering cholesterol in a host in need thereof, including a human, that includes the administration of an effective amt. of a compd. which binds to cholesterol-carrying lipoprotein (e.g. LDL or VLDL) in a manner that alters the three dimensional configuration of the lipoprotein and increases the binding affinity of the apoB-100 protein to the LDL receptor, including those on the surface of a hepatic cell.

IT **216167-82-7 216167-84-9 216167-91-8**
216167-93-0 216167-94-1 216167-95-2
216168-35-3 216168-36-4 216168-42-2
268738-49-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. to lower plasma cholesterol levels)

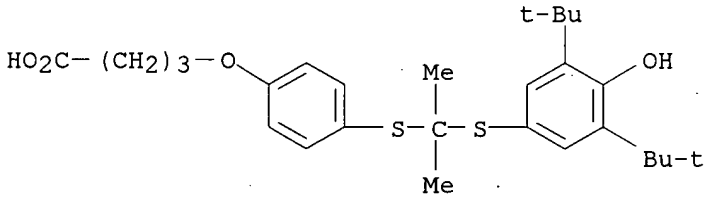
RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



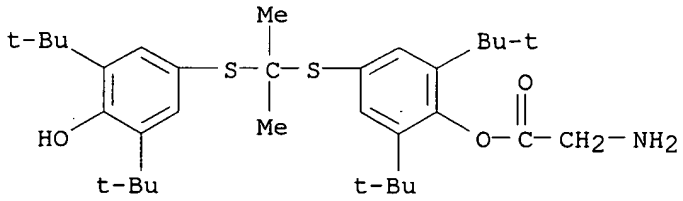
RN 216167-84-9 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)



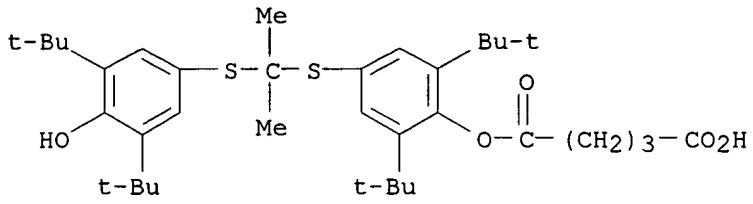
RN 216167-91-8 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



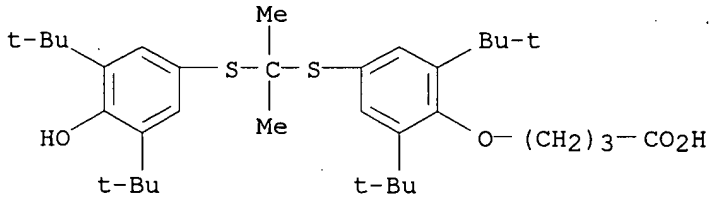
RN 216167-93-0 CAPLUS
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

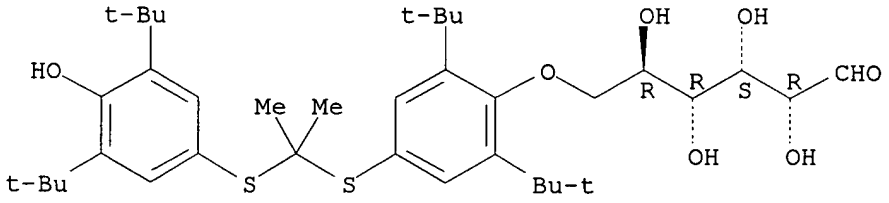


RN 216167-95-2 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



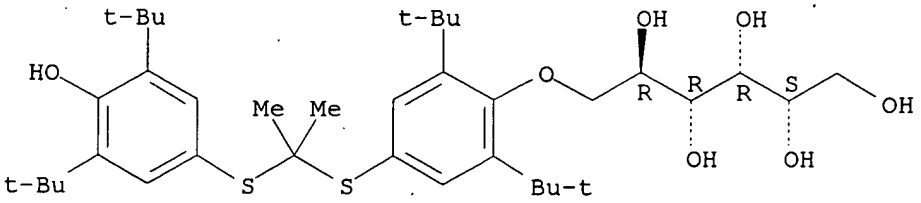
RN 216168-35-3 CAPLUS
CN D-Glucose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



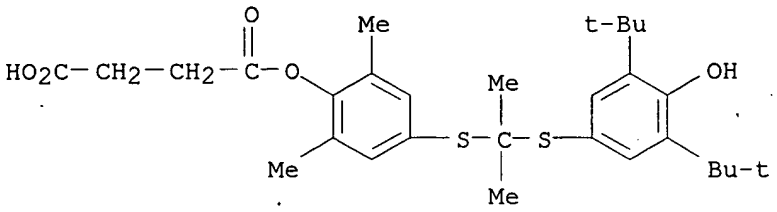
RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

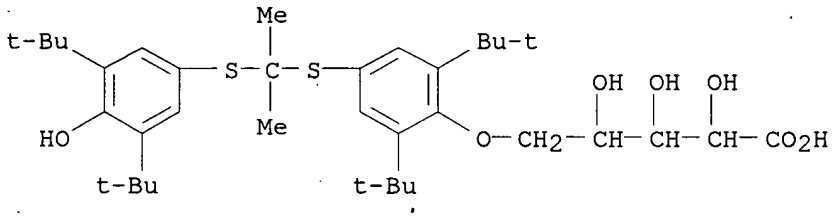


RN 216168-42-2 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-

hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenyl] ester (9CI) (CA INDEX NAME)



RN 268738-49-4 CAPLUS
CN Pentonic acid, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)



IT Apolipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(B-100; methods and compns. to lower plasma cholesterol levels)
IT Animal cell line
(Hep G2; methods and compns. to lower plasma cholesterol levels)
IT Liver
(LDL receptor of; methods and compns. to lower plasma cholesterol levels)
IT Lipoprotein receptors
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(LDL; methods and compns. to lower plasma cholesterol levels)
IT Electrophoresis
(agarose; methods and compns. to lower plasma cholesterol levels)
IT Phenotypes
(apoB-100; methods and compns. to lower plasma cholesterol levels)
IT Sequestering agents
(bile acid; methods and compns. to lower plasma cholesterol levels)
IT Immunoassay
(enzyme-linked immunosorbent assay, sandwich; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(high-d.; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(intermediate-d.; methods and compns. to lower plasma cholesterol levels)
IT Lipoproteins

RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(low-d.; methods and compns. to lower plasma cholesterol levels)

IT Anticholesteremic agents
Drug screening
Epitopes
Molecular association
(methods and compns. to lower plasma cholesterol levels)

IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(monoclonal; methods and compns. to lower plasma cholesterol levels)

IT Conformation
(protein; methods and compns. to lower plasma cholesterol levels)

IT Immunoassay
(sandwich; methods and compns. to lower plasma cholesterol levels)

IT Bile acids
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(sequestrants; methods and compns. to lower plasma cholesterol levels)

IT Drugs
(statins; methods and compns. to lower plasma cholesterol levels)

IT Antibodies
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(to apoB-100; methods and compns. to lower plasma cholesterol levels)

IT Biological transport
(uptake, LDL; methods and compns. to lower plasma cholesterol levels)

IT Lipoproteins
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(very-low-d.; methods and compns. to lower plasma cholesterol levels)

IT 9012-36-6, Agarose
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(electrophoresis; methods and compns. to lower plasma cholesterol levels)

IT 59-67-6, Nicotinic acid, biological studies 943-45-3D, Fibric acid, derivs. 1404-04-2, Neomycin 11041-12-6, Cholestyramine 23288-49-5, Probucol 25769-03-3, 1-Pyrrolidinecarbodithioic acid 216167-66-7 216167-67-8 216167-69-0 216167-74-7 **216167-82-7** **216167-84-9** **216167-91-8** **216167-93-0** **216167-94-1** **216167-95-2** **216168-35-3** **216168-36-4** **216168-42-2** 216168-49-9 268738-42-7 268738-43-8 268738-44-9 268738-45-0 268738-46-1 268738-47-2 268738-48-3 **268738-49-4** 268738-50-7 268738-51-8 268738-52-9 268738-53-0 268738-54-1
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. to lower plasma cholesterol levels)

IT 57-88-5, Cholesterol, biological studies
RL: BOC (Biological occurrence); BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence); PROC (Process)
(methods and compns. to lower plasma cholesterol levels)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

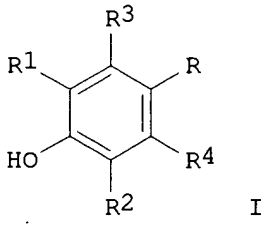
L17 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.

PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874851	A1	19981208	AU 1998-74851	19980514
AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6121319	A	20000919	US 1998-78935	19980514
BR 9809819	A	20010918	BR 1998-9819	19980514
JP 2002503227	T2	20020129	JP 1998-549502	19980514
NO 9905544	A	20000110	NO 1999-5544	19991112
MX 9910402	A	20000630	MX 1999-10402	19991112

PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9781 W 19980514

OTHER SOURCE(S): MARPAT 130:13646
GI



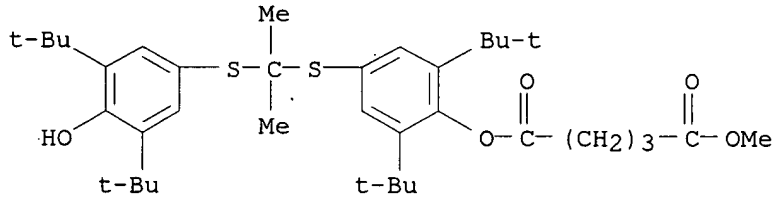
I

AB Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SO0-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepd. Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

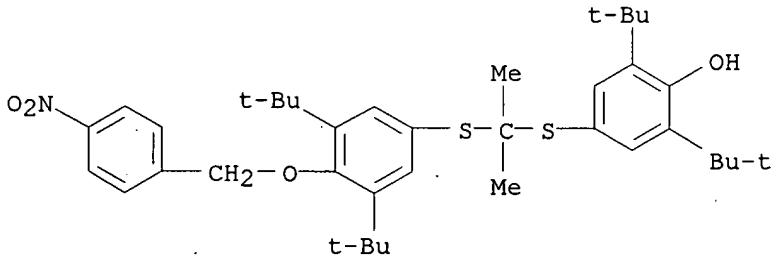
IT **216167-80-5P 216167-81-6P 216167-82-7P**
216167-83-8P 216167-84-9P 216167-85-0P
216167-86-1P 216167-88-3P 216167-89-4P
216167-90-7P 216167-91-8P 216167-92-9P
216167-93-0P 216167-94-1P 216167-95-2P
216167-96-3P 216167-97-4P 216167-98-5P
216167-99-6P 216168-00-2P 216168-01-3P

216168-02-4P 216168-03-5P 216168-05-7P
216168-07-9P 216168-14-8P 216168-18-2P
216168-20-6P 216168-22-8P 216168-24-0P
216168-26-2P 216168-27-3P 216168-28-4P
216168-29-5P 216168-30-8P 216168-31-9P
216168-32-0P 216168-33-1P 216168-34-2P
216168-35-3P 216168-36-4P 216168-37-5P
216168-38-6P 216168-39-7P 216168-41-1P
216168-42-2P 216168-43-3P 216168-44-4P
216168-47-7P 216168-48-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

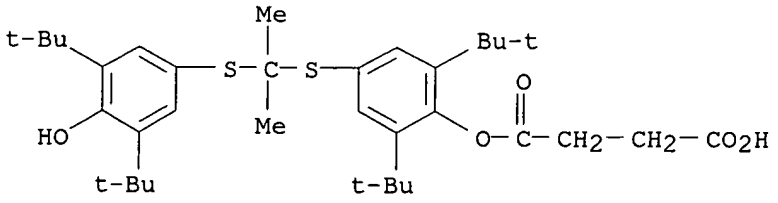
RN 216167-80-5 CAPLUS
CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)

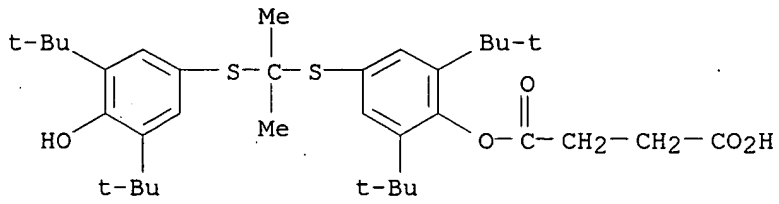


RN 216167-81-6 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-[(4-nitrophenyl)methoxy]phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

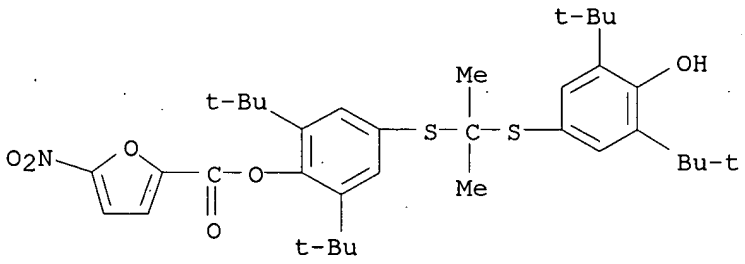


RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

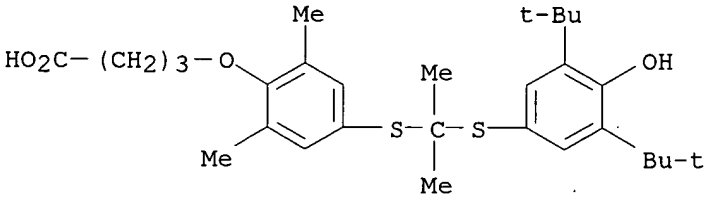




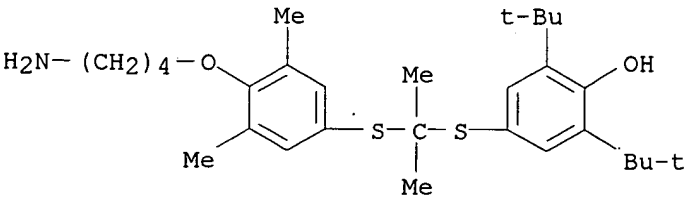
RN 216167-83-8 CAPLUS
CN 2-Furancarboxylic acid, 5-nitro-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



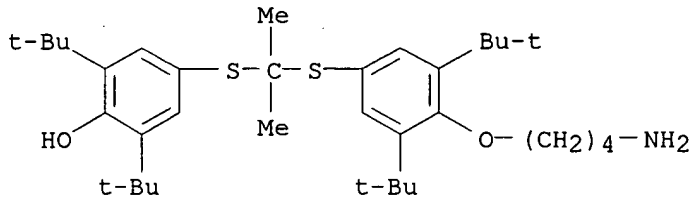
RN 216167-84-9 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)



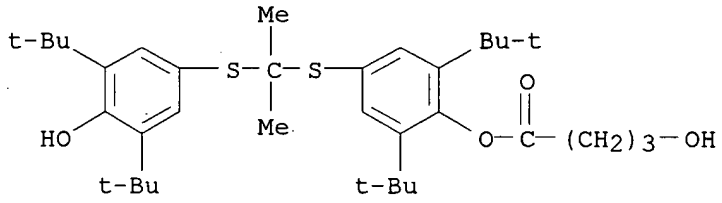
RN 216167-85-0 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-dimethylphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



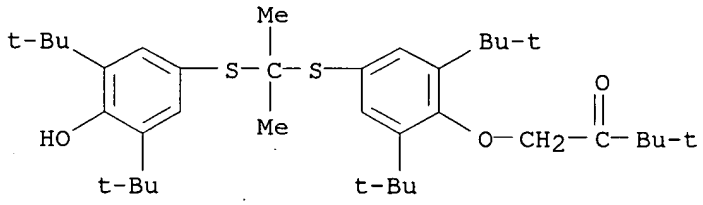
RN 216167-86-1 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



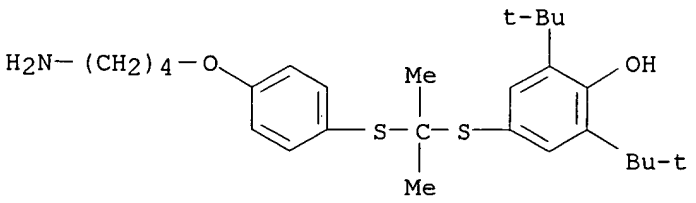
RN 216167-88-3 CAPLUS
CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



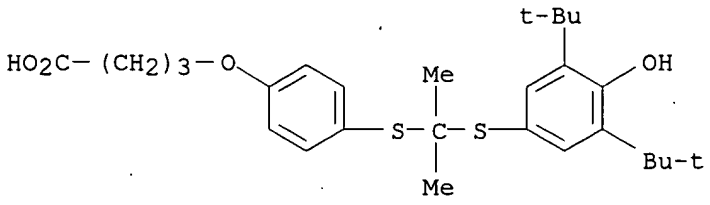
RN 216167-89-4 CAPLUS
CN 2-Butanone, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-3,3-dimethyl- (9CI) (CA INDEX NAME)



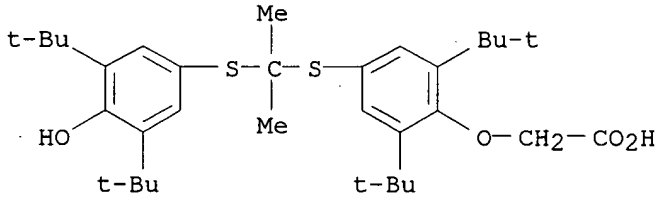
RN 216167-90-7 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



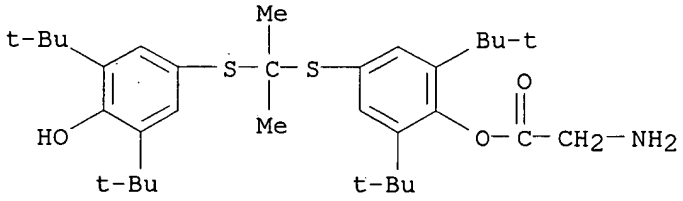
RN 216167-91-8 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



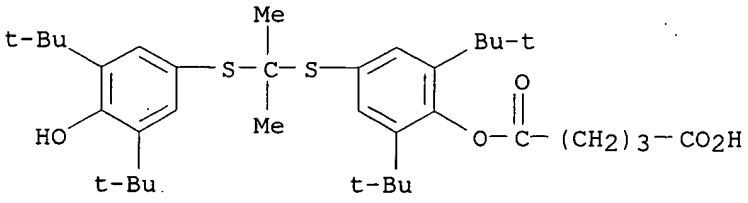
RN 216167-92-9 CAPLUS
CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



RN 216167-93-0 CAPLUS
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

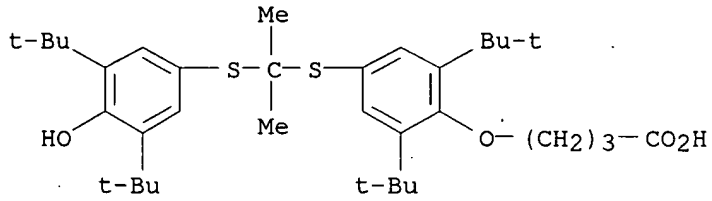


RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

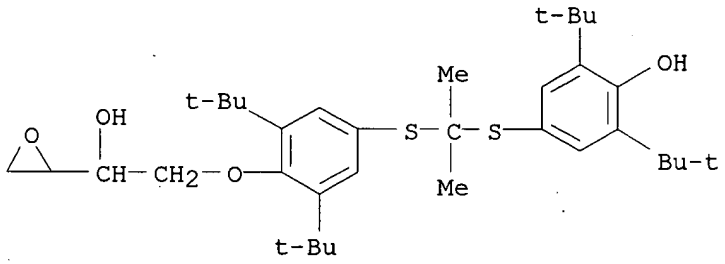


RN 216167-95-2 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX

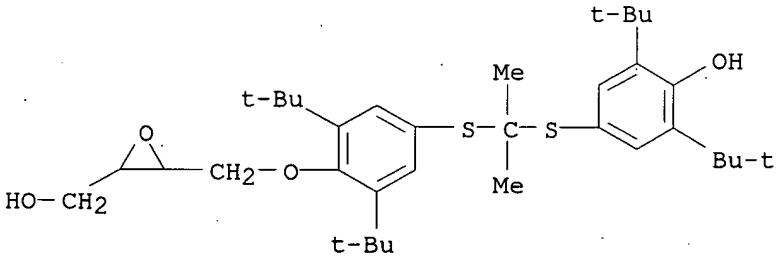
NAME)



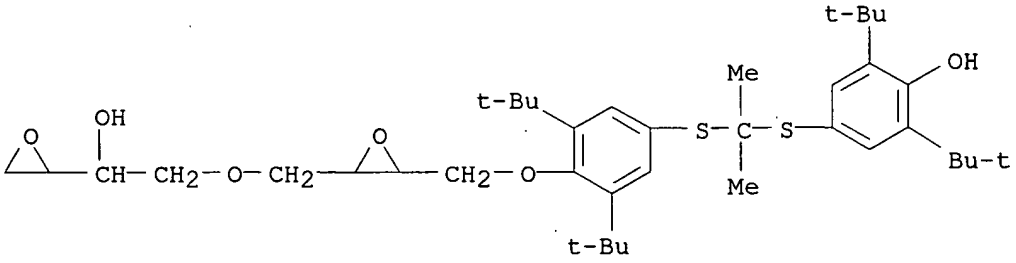
RN 216167-96-3 CAPLUS
CN Oxiranemethanol, .alpha.-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



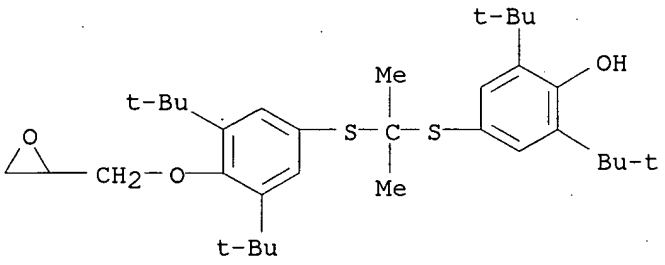
RN 216167-97-4 CAPLUS
CN Oxiranemethanol, 3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



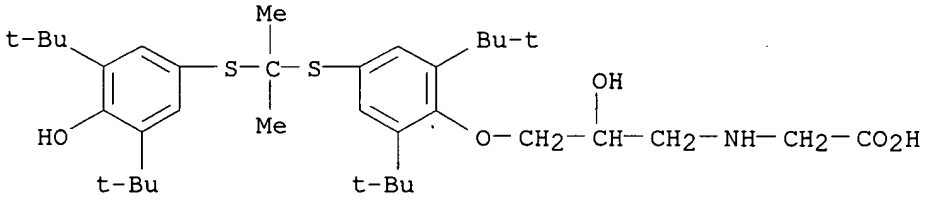
RN 216167-98-5 CAPLUS
CN Oxiranemethanol, .alpha.-[[[3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]oxiranyl]methoxy]methyl]- (9CI) (CA INDEX NAME)



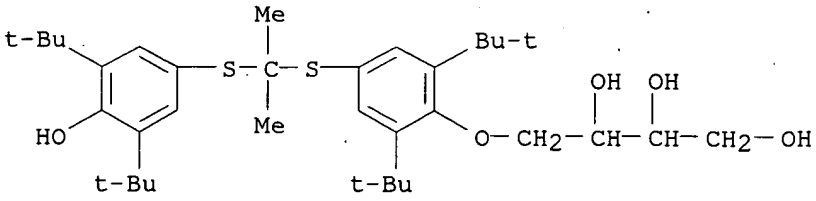
RN 216167-99-6 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(oxiranylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 216168-00-2 CAPLUS
CN Glycine, N-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

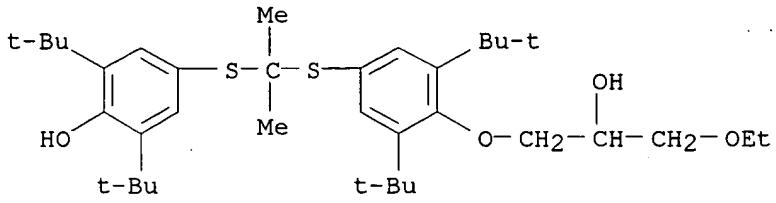


RN 216168-01-3 CAPLUS
CN 1,2,3-Butanetriol, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

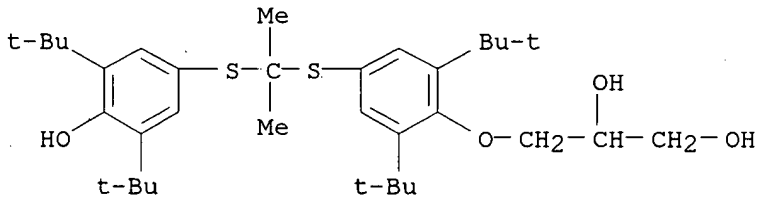


RN 216168-02-4 CAPLUS

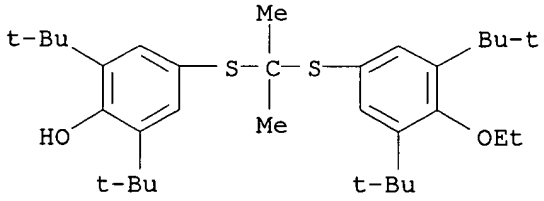
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-ethoxy-2-hydroxypropoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 216168-03-5 CAPLUS
CN 1,2-Propanediol, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

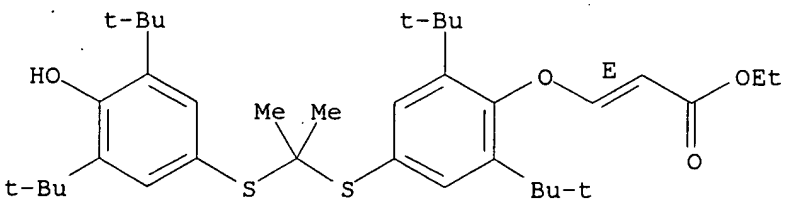


RN 216168-05-7 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-ethoxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

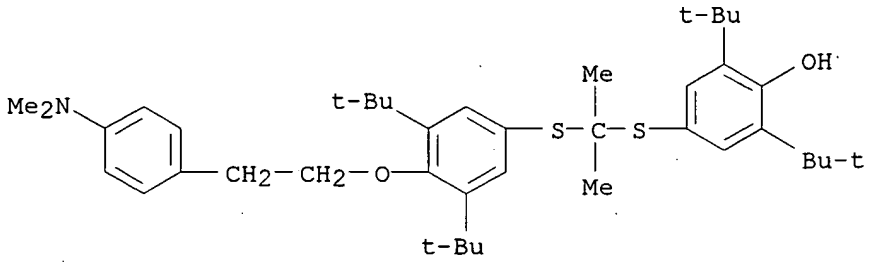


RN 216168-07-9 CAPLUS
CN 2-Propenoic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, ethyl ester, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 216168-14-8 CAPLUS
CN Phenol, 4-[[1-[[4-[2-[4-(dimethylamino)phenyl]ethoxy]-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 216168-18-2 CAPLUS
CN L-Arginine, N2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-1,4-dioxobutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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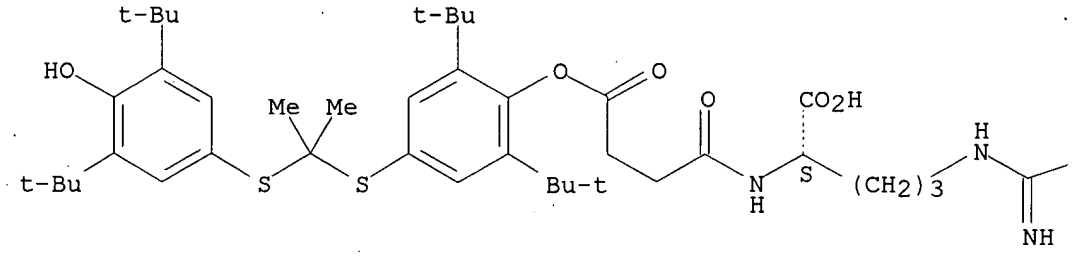

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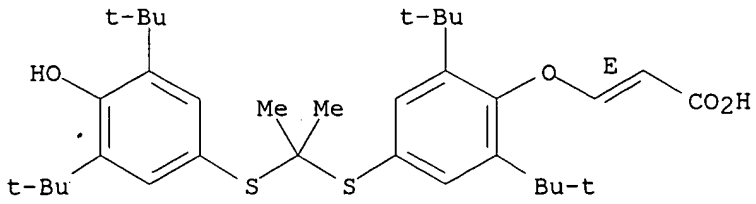
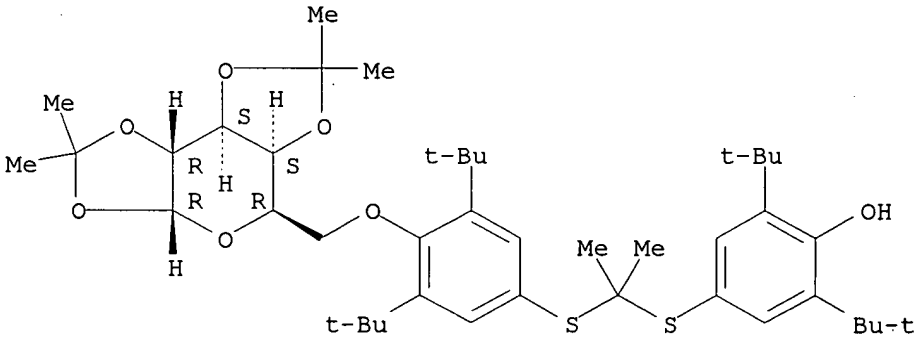
RN 216168-20-6 CAPLUS
CN 2-Propenoic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

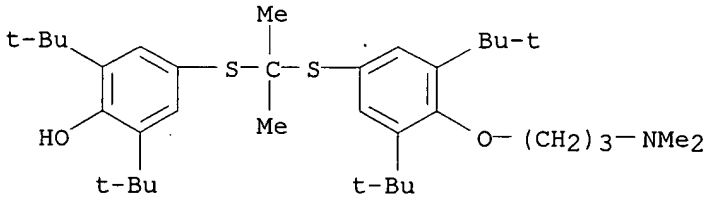


RN 216168-22-8 CAPLUS
CN .alpha.-D-Galactopyranose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

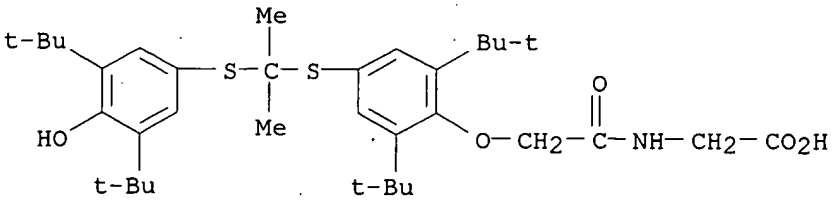
Absolute stereochemistry.



RN 216168-24-0 CAPLUS
CN Phenol, 4-[[1-[[4-[3-(dimethylamino)propoxy]-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

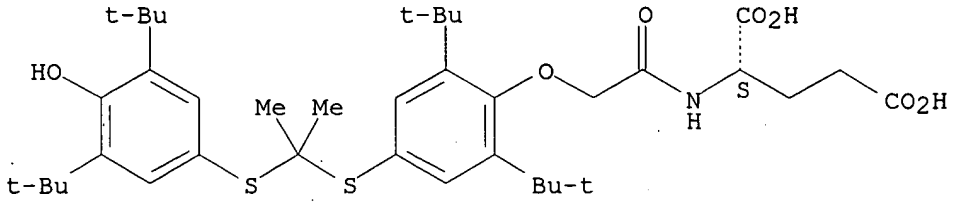


RN 216168-26-2 CAPLUS
CN Glycine, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]- (9CI) (CA INDEX NAME)



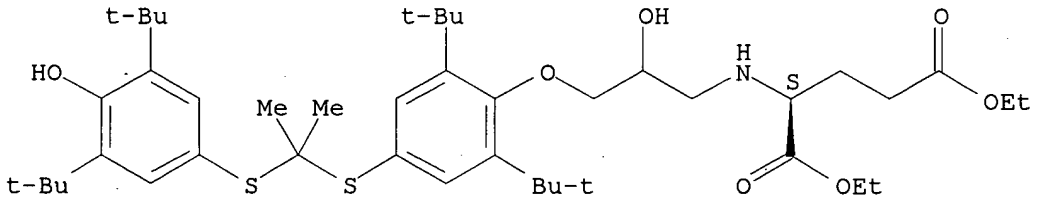
RN 216168-27-3 CAPLUS
CN L-Glutamic acid, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

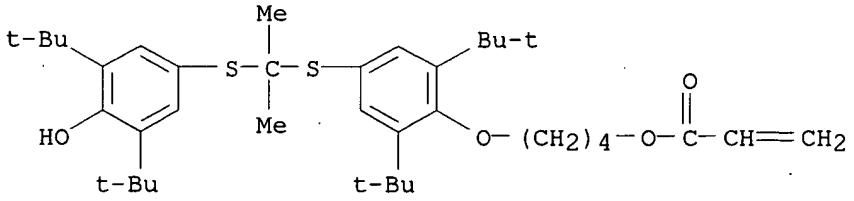


RN 216168-28-4 CAPLUS
CN L-Glutamic acid, N-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]-, diethyl ester (9CI) (CA INDEX NAME)

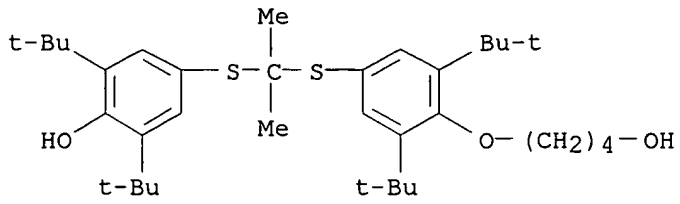
Absolute stereochemistry.



RN 216168-29-5 CAPLUS
CN 2-Propenoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]butyl ester (9CI) (CA INDEX NAME)

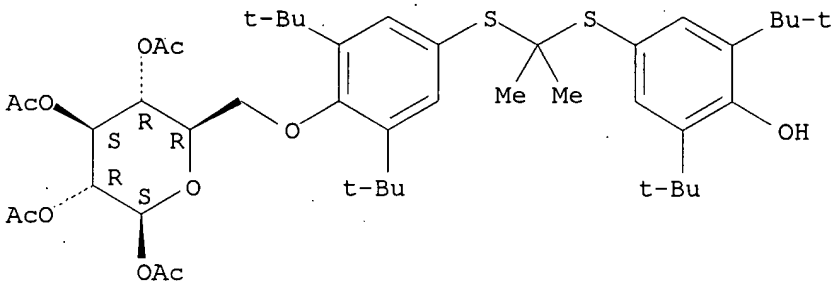


RN 216168-30-8 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(4-hydroxybutoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

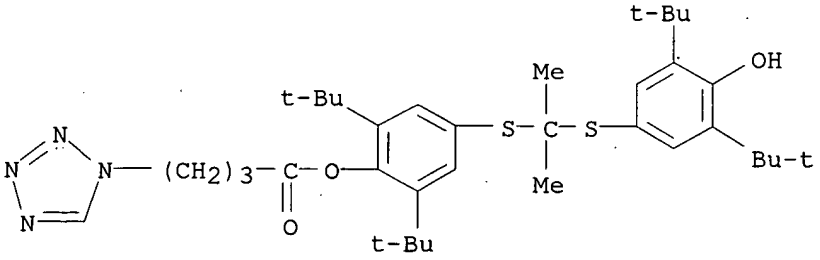


RN 216168-31-9 CAPLUS
CN .beta.-D-Glucopyranose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]-, 1,2,3,4-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

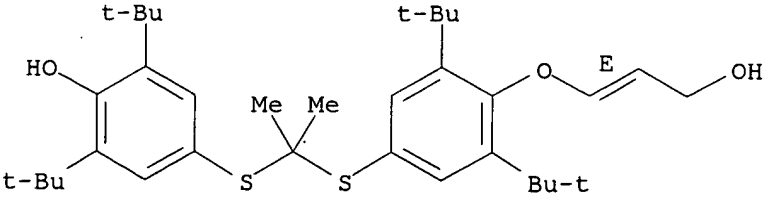


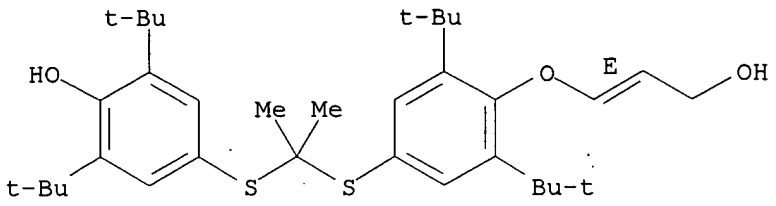
RN 216168-32-0 CAPLUS
CN 1H-Tetrazole-1-butanoic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



RN 216168-33-1 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-[[(1E)-3-hydroxy-1-propenyl]oxy]phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

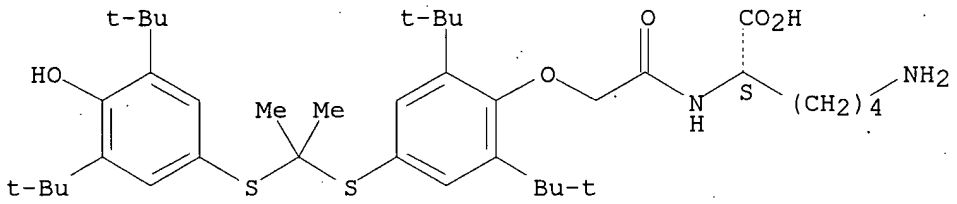
Double bond geometry as shown.





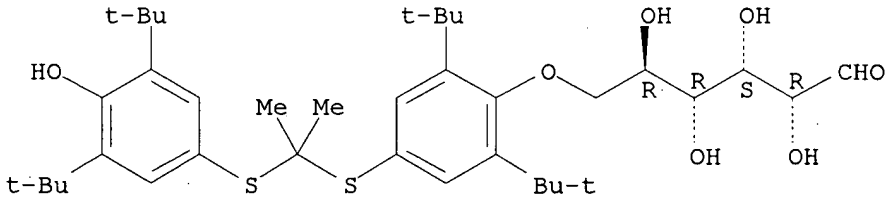
RN 216168-34-2 CAPLUS
CN L-Lysine, N2-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



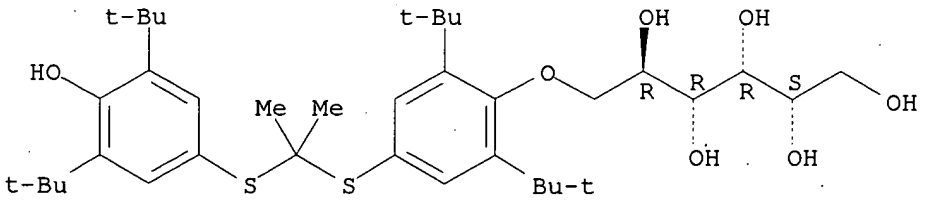
RN 216168-35-3 CAPLUS
CN D-Glucose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



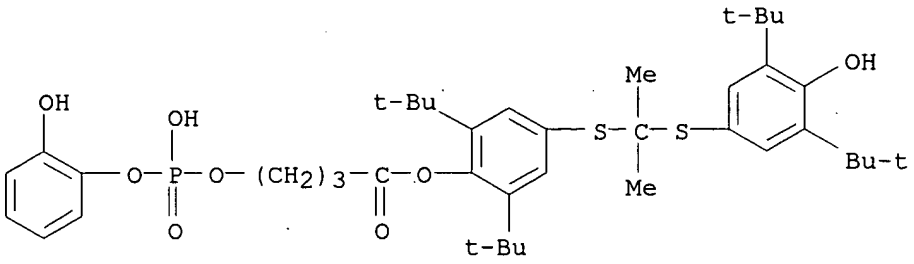
RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

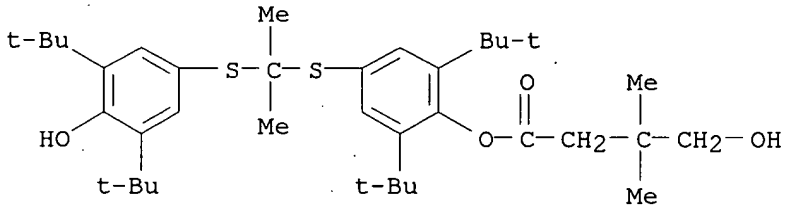


RN 216168-37-5 CAPLUS

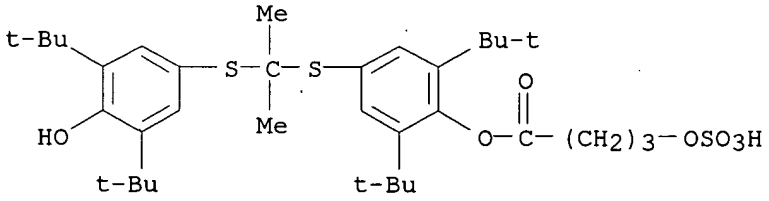
CN Butanoic acid, 4-[[hydroxy(2-hydroxyphenoxy)phosphinyl]oxy]-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



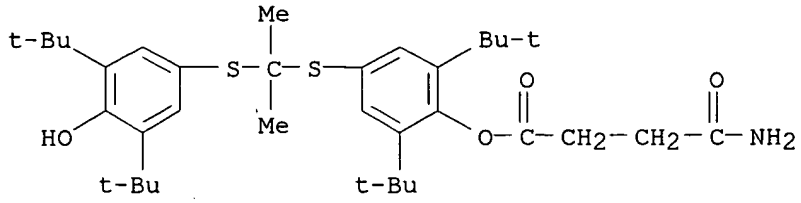
RN 216168-38-6 CAPLUS
CN Butanoic acid, 4-hydroxy-3,3-dimethyl-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



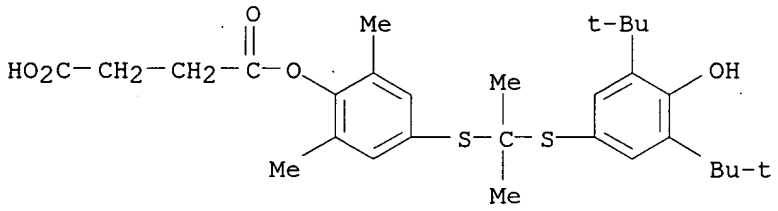
RN 216168-39-7 CAPLUS
CN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



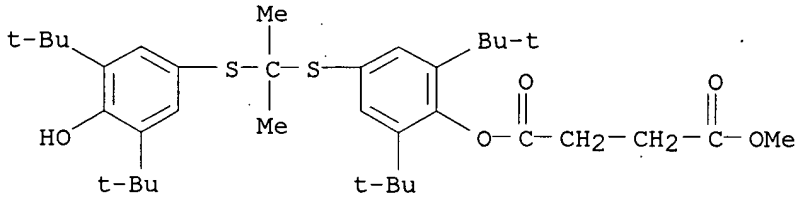
RN 216168-41-1 CAPLUS
CN Butanoic acid, 4-amino-4-oxo-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



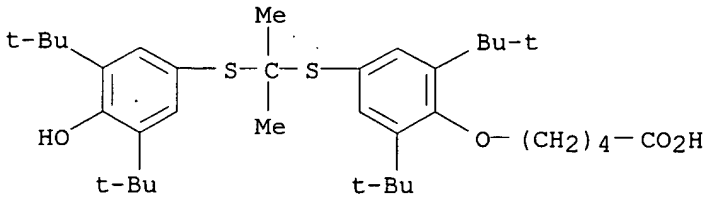
RN 216168-42-2 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenyl] ester (9CI) (CA INDEX NAME)



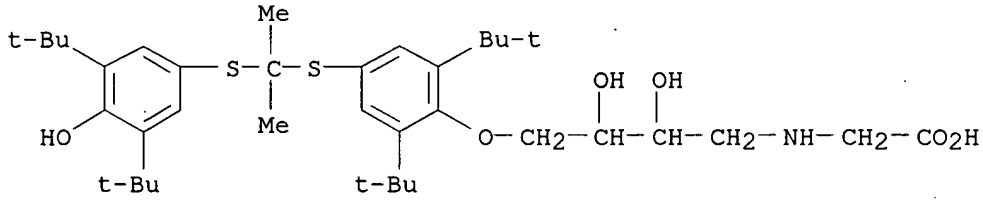
RN 216168-43-3 CAPLUS
CN Butanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



RN 216168-44-4 CAPLUS
CN Pentanoic acid, 5-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

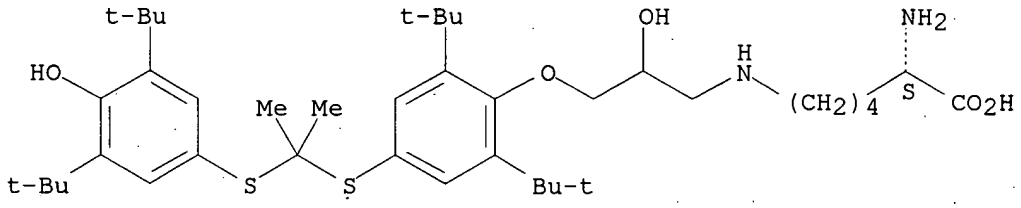


RN 216168-47-7 CAPLUS
CN Glycine, N-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2,3-dihydroxybutyl]- (9CI) (CA INDEX NAME)



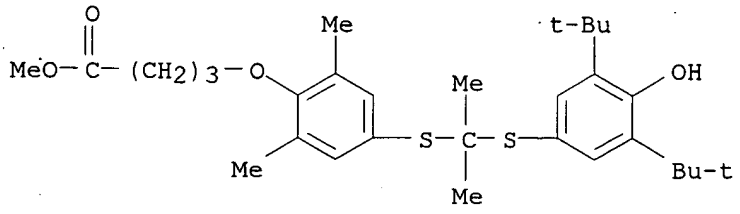
RN 216168-48-8 CAPLUS
CN L-Lysine, N6-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

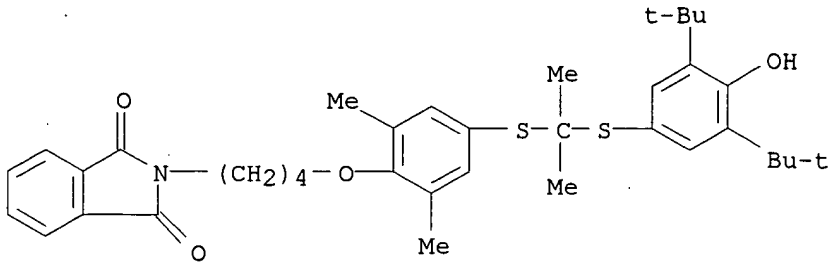


IT **216168-52-4P 216168-53-5P 216168-54-6P**
216168-55-7P 216168-57-9P 216168-58-0P
216168-59-1P 216168-60-4P 216168-61-5P
216168-62-6P 216168-63-7P 216168-66-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

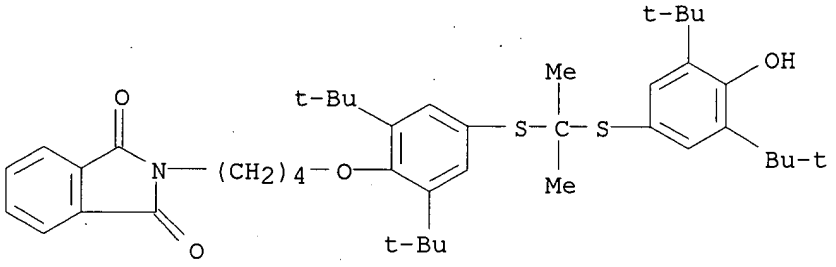
RN 216168-52-4 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]-, methyl ester (9CI) (CA INDEX NAME)



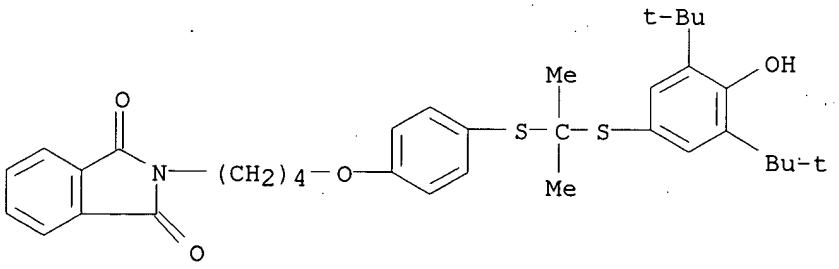
RN 216168-53-5 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]butyl]- (9CI) (CA INDEX NAME)



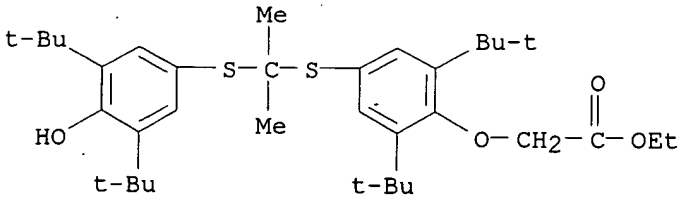
RN 216168-54-6 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]butyl]- (9CI) (CA INDEX NAME)



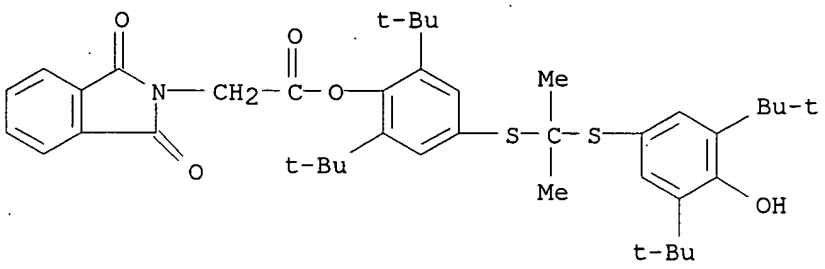
RN 216168-55-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]butyl]- (9CI) (CA INDEX NAME)



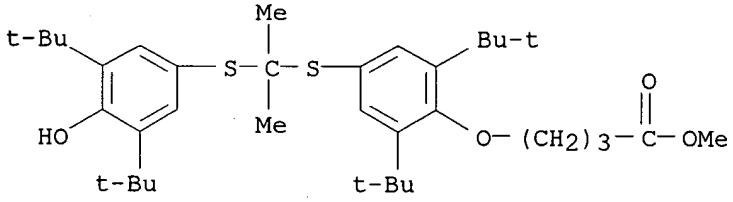
RN 216168-57-9 CAPLUS
CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



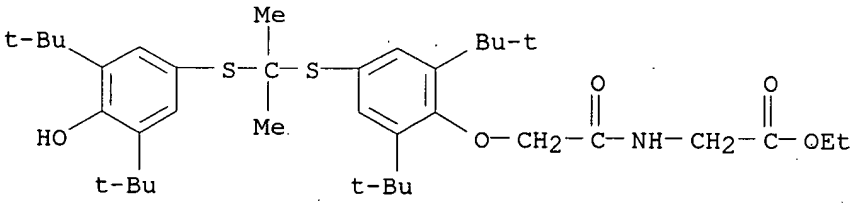
RN 216168-58-0 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-1,3-dioxo-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



RN 216168-59-1 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

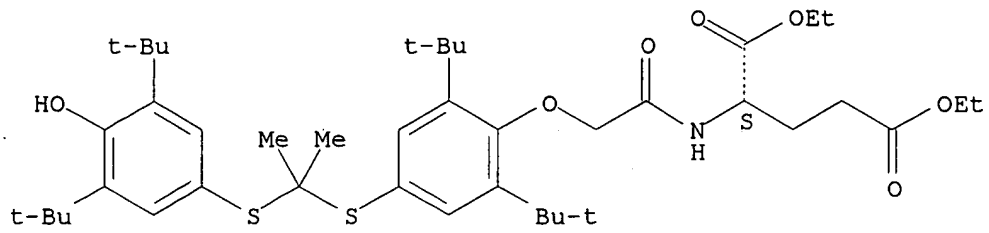


RN 216168-60-4 CAPLUS
CN Glycine, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)



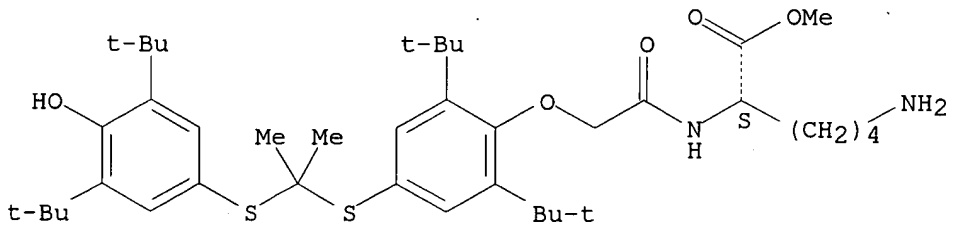
RN 216168-61-5 CAPLUS
CN L-Glutamic acid, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

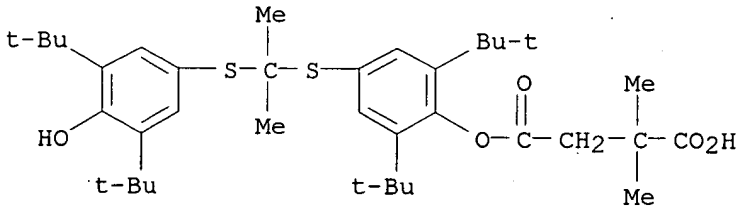


RN 216168-62-6 CAPLUS
CN L-Lysine, N2-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]-, methyl ester (9CI) (CA INDEX NAME)

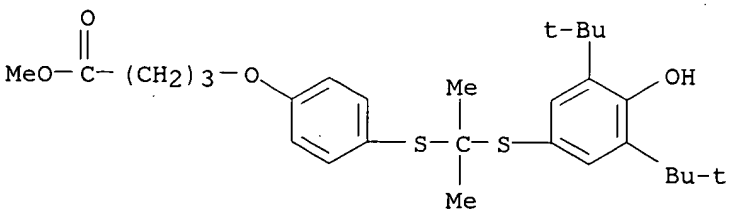
Absolute stereochemistry.



RN 216168-63-7 CAPLUS
CN Butanedioic acid, 2,2-dimethyl-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 216168-66-0 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



IT Cell adhesion molecules
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(VCAM-1, mediated disorders; treatment; prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT Anti-inflammatory agents
Cardiovascular agents
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

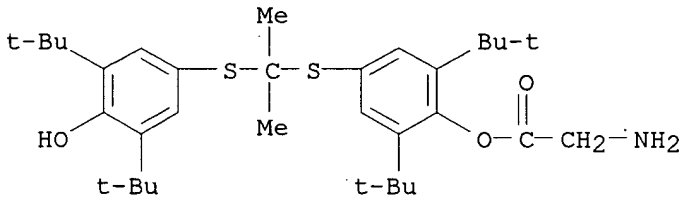
IT 54622-24-1P 123787-53-1P 141896-35-7P 216167-62-3P 216167-63-4P
216167-64-5P 216167-65-6P 216167-66-7P 216167-67-8P 216167-68-9P
216167-69-0P 216167-70-3P 216167-71-4P 216167-72-5P 216167-73-6P
216167-74-7P 216167-75-8P 216167-76-9P 216167-77-0P 216167-78-1P
216167-79-2P **216167-80-5P 216167-81-6P**
216167-82-7P 216167-83-8P 216167-84-9P
216167-85-0P 216167-86-1P 216167-88-3P
216167-89-4P 216167-90-7P 216167-91-8P
216167-92-9P 216167-93-0P 216167-94-1P
216167-95-2P 216167-96-3P 216167-97-4P
216167-98-5P 216167-99-6P 216168-00-2P
216168-01-3P 216168-02-4P 216168-03-5P
216168-05-7P 216168-07-9P 216168-10-4P 216168-12-6P
216168-14-8P 216168-16-0P **216168-18-2P**
216168-20-6P 216168-22-8P 216168-24-0P
216168-26-2P 216168-27-3P 216168-28-4P
216168-29-5P 216168-30-8P 216168-31-9P
216168-32-0P 216168-33-1P 216168-34-2P
216168-35-3P 216168-36-4P 216168-37-5P
216168-38-6P 216168-39-7P 216168-40-0P
216168-41-1P 216168-42-2P 216168-43-3P
216168-44-4P 216168-45-5P 216168-46-6P **216168-47-7P**
216168-48-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT 74-79-3, L-Arginine, reactions 100-11-8, 4-Nitrobenzyl bromide
104-81-4, 4-Methylbenzyl bromide 108-30-5, Succinic anhydride, reactions
108-55-4, Glutaric anhydride 402-49-3, 4-Trifluoromethylbenzyl bromide
459-46-1, 4-Fluorobenzyl bromide 556-52-5, Oxiranemethanol 610-57-1,
2,4-Dinitrobenzyl chloride 619-23-8, 3-Nitrobenzyl chloride 623-47-2,
Ethyl propiolate 623-48-3, Ethyl iodoacetate 1118-89-4, L-Glutamic
acid diethyl ester hydrochloride 1464-53-5, 1,3-Butadiene diepoxide
1499-17-8, 1,2-Phenylene phosphochloridate 1501-26-4, Methyl
4-chloroformylbutyrate 2144-37-8, Methyl 5-chloromethyl-2-furoate
2478-10-6, 4-Hydroxybutyl acrylate 3145-86-6, 4-Nitrobenzyl iodide
3179-63-3 3446-91-1 4064-06-6, 1,2,3,4-Di-O-isopropylidene-D-
galactopyranose 5394-18-3, N-(4-Bromobutyl)phthalimide 5407-04-5
6780-38-7 13100-46-4, 1,2,3,4-Tetra-O-acetyl-.beta.-D-glucopyranose
13737-36-5 14273-85-9, Methyl 4-iodobutyrate 15433-79-1,
5-(Dimethylaminomethyl)-2-furanmethanol 15445-34-8, Lysine methyl ester
hydrochloride 17347-61-4, 2,2-Dimethylsuccinic anhydride 18997-19-8,
Chloromethyl pivalate 20264-96-4 20395-28-2, 5-Chloropentyl acetate
23288-49-5, Probucol 25084-14-4, 5-Nitro-2-furoyl chloride 39720-27-9,
4-Chloromethylphenyl acetate 50438-75-0, Benzeneethanol,
4-Dimethylamino- 73384-82-4, 3-Bromo-1-propanesulfonic acid
216168-64-8 216168-65-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

IT 950-59-4P 216168-49-9P **216168-52-4P 216168-53-5P**
216168-54-6P 216168-55-7P 216168-57-9P
216168-58-0P 216168-59-1P 216168-60-4P

216168-61-5P 216168-62-6P 216168-63-7P
216168-66-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

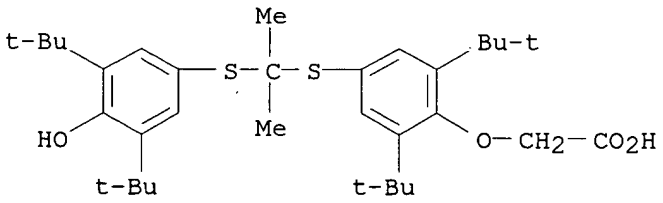
L18 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-93-0** REGISTRY
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C33 H51 N O3 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 3 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-92-9** REGISTRY
CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C33 H50 O4 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

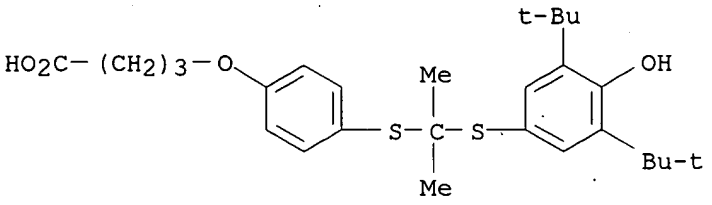


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-91-8** REGISTRY
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H38 O4 S2
SR CA

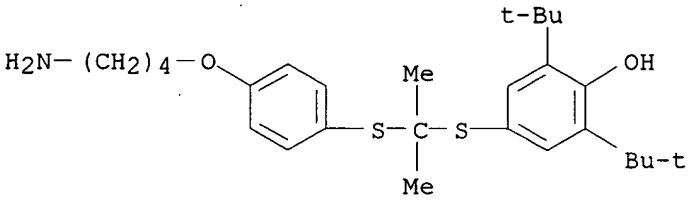
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

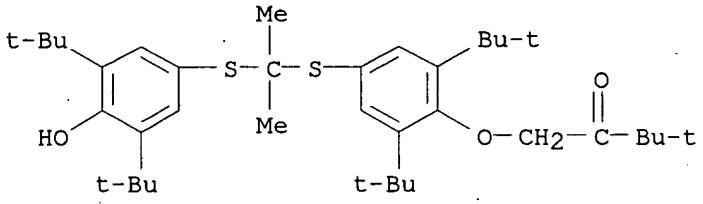
L18 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-90-7** REGISTRY
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H41 N O2 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

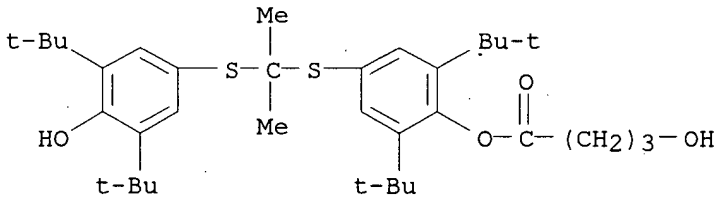
L18 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-89-4** REGISTRY
CN 2-Butanone, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-3,3-dimethyl- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C37 H58 O3 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

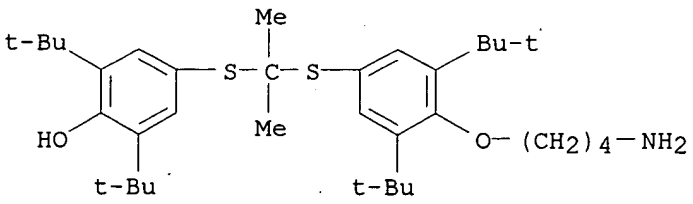
L18 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-88-3** REGISTRY
CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H54 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

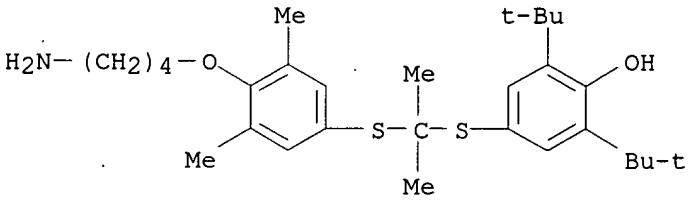
L18 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-86-1** REGISTRY
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H57 N O2 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

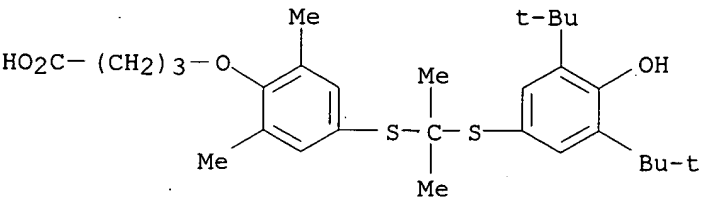
L18 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-85-0** REGISTRY
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-dimethylphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H45 N O2 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 10 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-84-9** REGISTRY
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H42 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

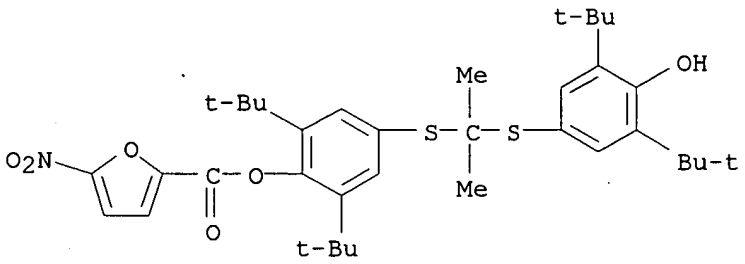


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 11 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-83-8** REGISTRY
CN 2-Furancarboxylic acid, 5-nitro-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-

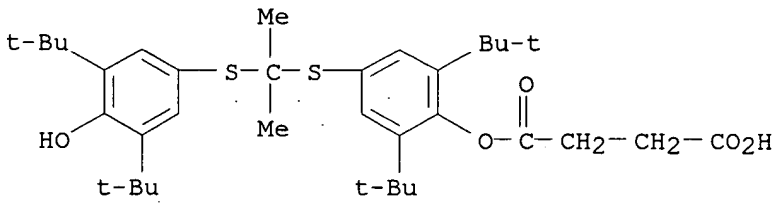
hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H49 N O6 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-82-7** REGISTRY
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)
OTHER NAMES:
CN AGI 1067
FS 3D CONCORD
MF C35 H52 O5 S2
SR CA
LC STN Files: BIOSIS, CA, CAPLUS, CASREACT, DRUGNL, DRUGUPDATES, SYNTHLINE, TOXCENTER, USPATFULL

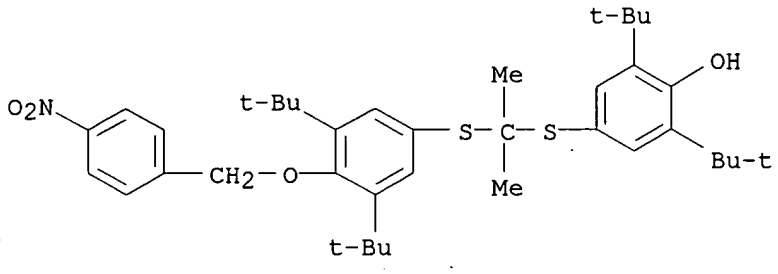


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9 REFERENCES IN FILE CA (1957 TO DATE)
9 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 13 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-81-6** REGISTRY
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-[(4-nitrophenyl)methoxy]phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD

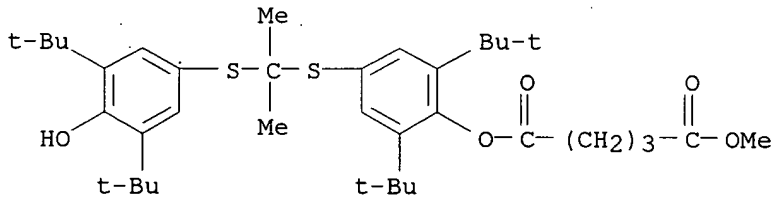
MF C38 H53 N O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L18 ANSWER 14 OF 14 REGISTRY COPYRIGHT 2003 ACS
RN **216167-80-5** REGISTRY
CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C37 H56 O5 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

=> s 216167-82-7 or 216167-80-5 or 216167-84-9
1 216167-82-7
(216167-82-7/RN)
1 216167-80-5
(216167-80-5/RN)
1 216167-84-9
(216167-84-9/RN)
L19 3 216167-82-7 OR 216167-80-5 OR 216167-84-9

=> file caplus
COST IN U.S. DOLLARS SINCE FILE TOTAL

	ENTRY	SESSION
FULL ESTIMATED COST	26.32	302.36

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-7.16

FILE 'CAPLUS' ENTERED AT 11:32:42 ON 25 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 25 May 2003 VOL 138 ISS 22
FILE LAST UPDATED: 23 May 2003 (20030523/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l19
L20 9 L19

=> d ibib abs hitstr 1-9

L20 ANSWER 1 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:849415 CAPLUS
DOCUMENT NUMBER: 137:333157
TITLE: Probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol
INVENTOR(S): Luchoomun, Jayraz; Saxena, Uday; Sundell, Cynthia L.; Sikorski, James A.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 161 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002087556	A2	20021107	WO 2002-US12678	20020411
WO 2002087556	A3	20030206		
WO 2002087556	C2	20030320		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003064967 A1 20030403 US 2002-122516 20020411

PRIORITY APPLN. INFO.: US 2001-283376P P 20010411
US 2001-345025P P 20011109

OTHER SOURCE(S): MARPAT 137:333157

AB It has been discovered that certain selected probucol monoesters, and their pharmaceutically acceptable salts or prodrugs, are useful for increasing circulating HDL cholesterol. These compds. may also improve HDL functionality by (a) increasing clearance of cholesteryl esters, (b) increasing HDL-particle affinity for hepatic cell surface receptors, or (c) increasing the half-life of apoAI-HDL. The pharmaceutical compns. comprise probucol monoesters alone or in combination with other agents, e.g, statins, IBAT inhibitors, MTP inhibitors, cholesterol absorption inhibitors, phytosterols, CETP inhibitors, fibric acid derivs., and antihypertensive agents. For example, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]ester of pentanedioic acid, prepd. from probucol and glutaric anhydride, elevated HDLc in hyperlipidemic hamster by 22% (av. of 3 expts., range 5-44%), compared to untreated controls after 2 wk treatment at a dose of 150 mg/kg/day. LDLc was reduced by 29% on av., VLDL cholesterol by 42%, and triglycerides by 24%, compared to controls. The compd. was well tolerated and all animals gained wt.

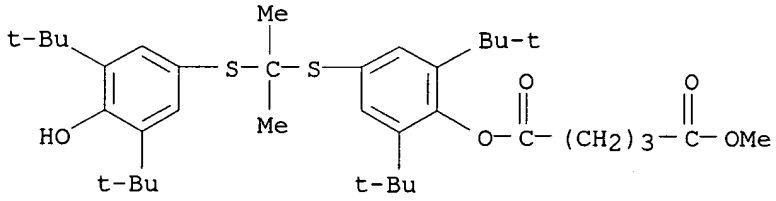
IT **216167-80-5P 216167-82-7P**

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of probucol monoesters for increasing levels and improving functionality of plasma HDL cholesterol)

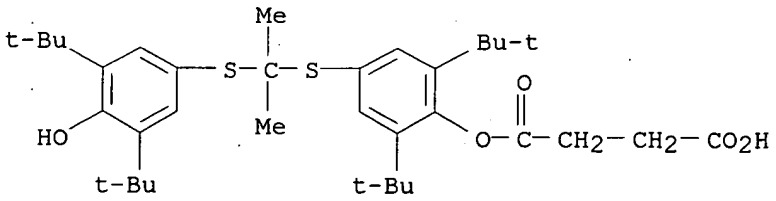
RN 216167-80-5 CAPLUS

CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

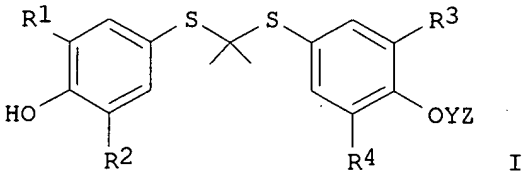


L20 ANSWER 2 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:814837 CAPLUS
DOCUMENT NUMBER: 137:320305
TITLE: Probucol derivatives and methods for treating transplant rejection
INVENTOR(S): Edwards, David B.; Somers, Patricia K.; Glass, Mitchell
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 22 pp., Cont.-in-part of U.S. Ser. No. 815,262.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002156022	A1	20021024	US 2001-36307	20011025
US 6147250	A	20001114	US 1998-79213	19980514
US 6548699	B1	20030415	US 1999-370046	19990806
US 2002016300	A1	20020207	US 2001-815262	20010321
US 2002177717	A1	20021128	US 2002-60734	20020130
US 2002169215	A1	20021114	US 2002-114346	20020402
US 2002188118	A1	20021212	US 2002-115206	20020402
US 2002193446	A1	20021219	US 2002-114351	20020402

PRIORITY APPLN. INFO.:
US 1997-47020P P 19970514
US 1998-79213 A1 19980514
US 1999-370046 A2 19990806
US 2000-191046P P 20000321
US 2001-815262 A2 20010321

OTHER SOURCE(S): MARPAT 137:320305
GI

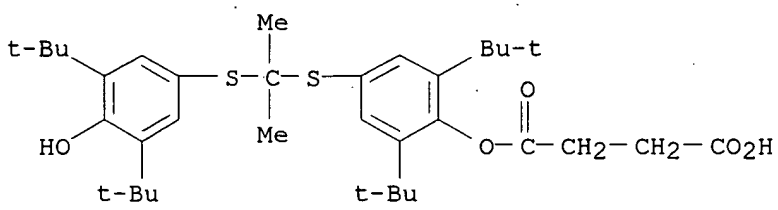


I

AB The invention discloses the use of I [R1-R4 = H, OH, C1-10 alkyl, aryl, heteroaryl, etc.; Y = bond, C(O); Z = C1-10 alkyl, C2-10 alkenyl, C2-10 alkynyl, etc.], and pharmaceutically acceptable salts thereof, alone or in combination, for the treatment of transplant rejection. Prepn. of I [R1-R4 = tert-butyl; YZ = (CH2)3COOH] from probucol which was evaluated in a graft arteriopathy model and Me 4-chlorobutyrate is described.

IT **216167-82-7**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol derivs. for treatment of transplant rejection)

RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

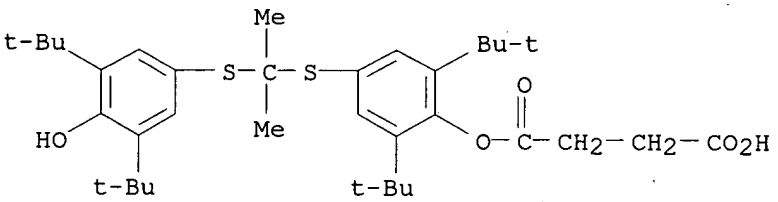


L20 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:641096 CAPLUS
DOCUMENT NUMBER: 138:313884
TITLE: Novel phenolic antioxidants as multifunctional inhibitors of inducible VCAM-1 expression for use in atherosclerosis
AUTHOR(S): Meng, Charles Q.; Somers, Patricia K.; Rachita, Carolyn L.; Holt, Lisa A.; Hoong, Lee K.; Zheng, X. Sharon; Simpson, Jacob E.; Hill, Russell R.; Olliff, Lynda K.; Kunsch, Charles; Sundell, Cynthia L.; Parthasarathy, Sampath; Saxena, Uday; Sikorski, James A.; Wasserman, Martin A.
CORPORATE SOURCE: AtheroGenics, Inc., Alpharetta, GA, 30004, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2002), 12(18), 2545-2548
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A series of novel phenolic compds. has been discovered as potent inhibitors of TNF-.alpha.-inducible expression of vascular cell adhesion mol.-1 (VCAM-1) with concurrent antioxidant and lipid-modulating properties. Optimization of these multifunctional agents led to the identification of AGI-1067 as a clin. candidate with demonstrated efficacies in animal models of atherosclerosis and hyperlipidemia.

IT **216167-82-7**, AGI-1067
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(phenolic antioxidants as inhibitors of inducible VCAM-1 expression for use in atherosclerosis)

RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

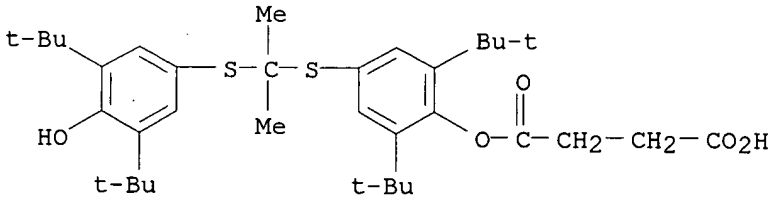
L20 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2002:580040 CAPLUS

DOCUMENT NUMBER: 138:130391
TITLE: AGI-1067 AtheroGenics
AUTHOR(S): Hatch, Grant M.
CORPORATE SOURCE: Department of Pharmacology and Therapeutics Faculty of Medicine, University of Manitoba, Winnipeg, MB, R3E 0T6, Can.
SOURCE: Current Opinion in Investigational Drugs (PharmaPress Ltd.) (2002), 3(3), 433-436
CODEN: COIDAZ; ISSN: 1472-4472
PUBLISHER: PharmaPress Ltd.
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. AGI-1067 is an oral VCAM-1 (vascular cell adhesion mol.-1) gene expression inhibitor under development by AtheroGenics for the potential prevention of atherosclerosis (hypercholesterolemia) and restenosis. AGI-1067 was also being developed in collaboration with Schering-Plough; however, in Oct. 2001, all rights to the drug were returned to AtheroGenics. In Feb. 2001, dosing was completed in phase II trials for the potential treatment and prevention of restenosis and atherosclerosis following angioplasty. In Dec. 2001, further phase II trials (CART-2) were initiated for the treatment of restenosis and atherosclerosis. Early-phase clin. trials are ongoing for the prevention of atherosclerosis. In Jan. 2002, analysts at Adams, Harkness & Hill predicted that AGI-1067 would be launched in the second half of 2005, with sales of US $100 m in that year and US $540 m in 2006. It was also believed that AtheroGenics would look to sign a marketing partnership following the expected completion of the CART-2 trial in 2002.

IT **216167-82-7**, AGI 1067
RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(AGI-1067 pharmacol. and clin. development)

RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



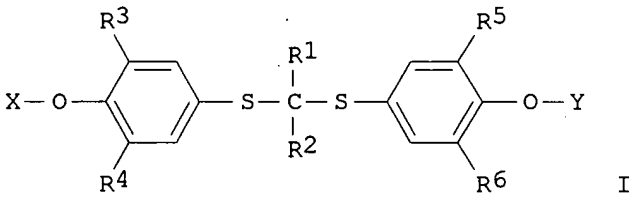
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:863541 CAPLUS
DOCUMENT NUMBER: 135:371524
TITLE: Process for preparing water-soluble probucol acyl esters for use as food antioxidants
INVENTOR(S): Jass, Paul Alan
PATENT ASSIGNEE(S): Salsbury Chemicals, Inc., USA
SOURCE: U.S., 5 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English

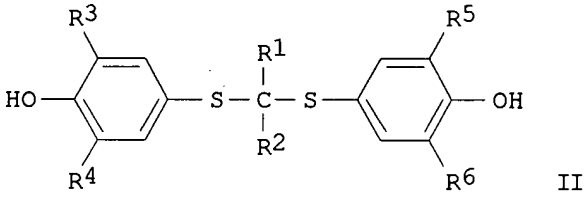
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6323359	B1	20011127	US 2000-562657	20000502

PRIORITY APPLN. INFO.: US 2000-562657 20000502
OTHER SOURCE(S): CASREACT 135:371524; MARPAT 135:371524
GI



I



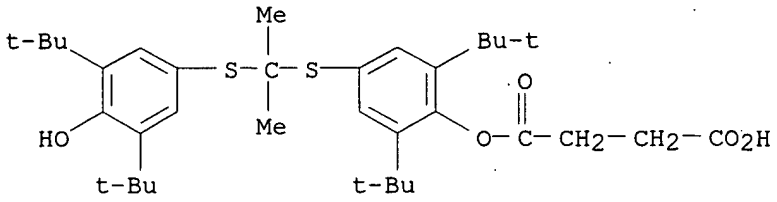
II

AB Water-sol. derivs. of probucol compds. [I; R1, R2 = alkyl, alkenyl, aryl; R3-R6 = C1-4 alkyl; X, Y = H, (un)satd. (un)substituted C1-8 acyl] (e.g., probucol mono- and disuccinate), useful as food antioxidants, are prepd. by the reaction of a soln. of a probucol compd. (II) with an alkali metal hydroxide, alkali metal alkoxide (e.g., potassium tert-butoxide), alkylammonium alkoxide, alkylammonium hydroxide and mixts. forming an ammonium or an alkali metal salt of the probucol compd. and reacting the salt with a carboxylic acid anhydride selected from succinic anhydride, glutaric anhydride, adipic anhydride, suberic anhydride, sebacic anhydride, azelaic anhydride, phthalic anhydride, and maleic anhydride.

IT **216167-82-7P**
RL: FFD (Food or feed use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(process for prepg. water-sol. probucol acyl esters for use as food antioxidants)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:335659 CAPLUS
DOCUMENT NUMBER: 132:343330
TITLE: Methods and compositions to lower plasma cholesterol levels
INVENTOR(S): Medford, Russell M.; Saxena, Uday
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

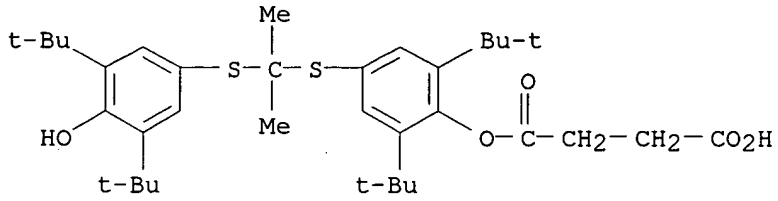
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028332	A1	20000518	WO 1999-US26519	19991109
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1137948	A1	20011004	EP 1999-962732	19991109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002529740	T2	20020910	JP 2000-581459	19991109

PRIORITY APPLN. INFO.: US 1998-107644P P 19981109
WO 1999-US26519 W 19991109

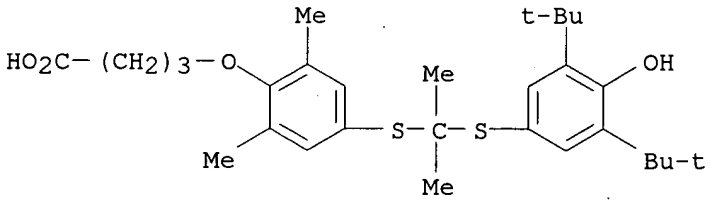
AB A method for detg. whether a compd. binds to a lipoprotein, e.g. LDL or VLDL, in a manner which will lower plasma cholesterol is provided that includes assessing the ability of the compd. to form a complex with the lipoprotein, e.g., LDL or VLDL, and then detg. whether the newly formed complex causes a change in the structure of apoB-100 that results in increased binding affinity to the LDL receptor. Also disclosed is a method for lowering cholesterol in a host in need thereof, including a human, that includes the administration of an effective amt. of a compd. which binds to cholesterol-carrying lipoprotein (e.g. LDL or VLDL) in a manner that alters the three dimensional configuration of the lipoprotein and increases the binding affinity of the apoB-100 protein to the LDL receptor, including those on the surface of a hepatic cell.

IT **216167-82-7 216167-84-9**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. to lower plasma cholesterol levels)

RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 216167-84-9 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 7 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:48609 CAPLUS
DOCUMENT NUMBER: 130:119591
TITLE: Antioxidant enhancement of therapy for hyperproliferative conditions
INVENTOR(S): Chinery, Rebecca; Beauchamp, R. Daniel; Coffey, Robert J.; Medford, Russell M.; Wadsinski, Brian
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9901118	A2	19990114	WO 1998-US13750	19980701
WO 9901118	A3	19990422		
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9882827	A1	19990125	AU 1998-82827	19980701
EP 1019034	A2	20000719	EP 1998-933078	19980701

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

JP 2002511878	T2	20020416	JP 1999-507360		19980701
US 2001049349	A1	20011206	US 2001-779086		20010207
PRIORITY APPLN. INFO.:			US 1997-886653	A	19970701
			US 1997-967492	A	19971111
			US 1998-108609	B1	19980701
			WO 1998-US13750	W	19980701

OTHER SOURCE(S): MARPAT 130:119591

AB A method to enhance the cytotoxic activity of an antineoplastic drug comprises administering an effective amt. of the antineoplastic drug to a host exhibiting abnormal cell proliferation in combination with an effective cytotoxicity-increasing amt. of an antioxidant. The invention also includes a method to decrease the toxicity to an antineoplastic agent or increase the therapeutic index of an antineoplastic agent administered for the treatment of a solid growth of abnormally proliferating cells, comprising administering an antioxidant prior to, with, or following the antineoplastic treatment.

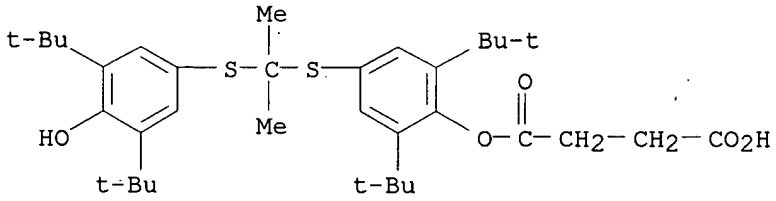
IT **216167-82-7**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antioxidant enhancement of therapy for hyperproliferative conditions)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



L20 ANSWER 8 OF 9 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1998:761875 CAPLUS

DOCUMENT NUMBER: 130:13646

TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1

INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.

PATENT ASSIGNEE(S): Atherogenics, Inc., USA

SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

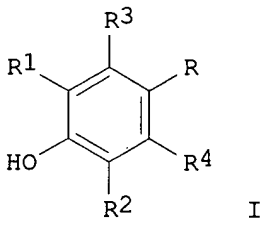
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX,

NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT,
UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9874851	A1	19981208	AU 1998-74851		19980514
AU 750041	B2	20020711			
EP 994853	A2	20000426	EP 1998-922264		19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
US 6121319	A	20000919	US 1998-78935		19980514
BR 9809819	A	20010918	BR 1998-9819		19980514
JP 2002503227	T2	20020129	JP 1998-549502		19980514
NO 9905544	A	20000110	NO 1999-5544		19991112
MX 9910402	A	20000630	MX 1999-10402		19991112
PRIORITY APPLN. INFO.:			US 1997-47020P	P	19970514
			WO 1998-US9781	W	19980514

OTHER SOURCE(S): MARPAT 130:13646
GI



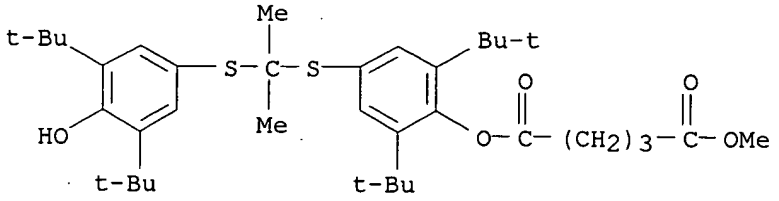
I

AB Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SO0-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepd. Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

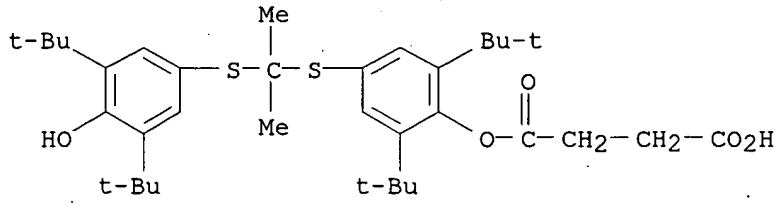
IT **216167-80-5P 216167-82-7P 216167-84-9P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

RN 216167-80-5 CAPLUS

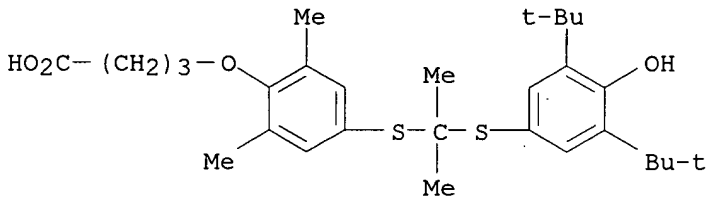
CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 216167-84-9 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)



L20 ANSWER 9 OF 9 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761806 CAPLUS
DOCUMENT NUMBER: 130:20572
TITLE: Monoesters of probucol for the treatment of cardiovascular and inflammatory disease
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851289	A2	19981119	WO 1998-US9773	19980514
WO 9851289	A3	19990514		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9875711	A1	19981208	AU 1998-75711	19980514
AU 747801	B2	20020523		
EP 981343	A2	20000301	EP 1998-923411	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO

BR 9809793	A	20000627	BR 1998-9793		19980514
NZ 501069	A	20000728	NZ 1997-501069		19980514
US 6121319	A	20000919	US 1998-78935		19980514
JP 2001524986	T2	20011204	JP 1998-549498		19980514
NO 9905543	A	20000110	NO 1999-5543		19991112
MX 9910404	A	20000630	MX 1999-10404		19991112

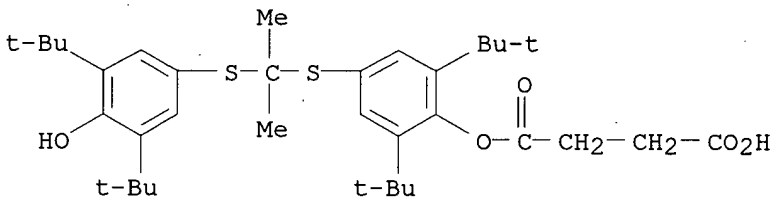
PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9773 W 19980514

AB This invention is a method and compn. for the inhibition of VCAM-1, and in particular for the treatment of cardiovascular or inflammatory disease, including atherosclerosis, that includes the administration of an effective amt. of an ester of probucol. Rabbits were fed high fat chow (0.5% cholesterol and 3% coconut oil) contg. 0.5% probucol monosuccinate (I) for 3wk. I caused a significant redn. in all lipoprotein fractions.

IT **216167-82-7**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoesters of probucol for treatment of cardiovascular and inflammatory disease)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	41.24	343.60

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.86	-13.02

FILE 'REGISTRY' ENTERED AT 11:33:34 ON 25 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 23 MAY 2003 HIGHEST RN 519387-75-8
DICTIONARY FILE UPDATES: 23 MAY 2003 HIGHEST RN 519387-75-8

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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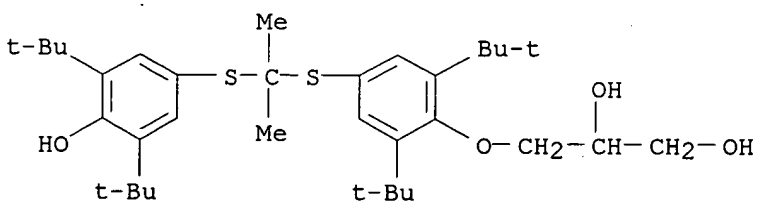
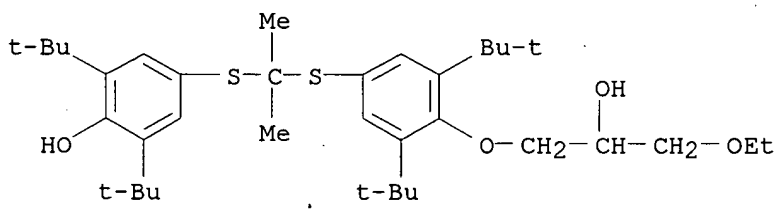
L21 ANSWER 1 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216168-03-5** REGISTRY
CN 1,2-Propanediol, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H54 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT.

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

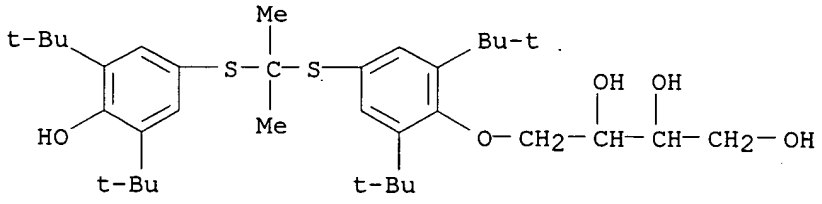
L21 ANSWER 2 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216168-02-4** REGISTRY
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-ethoxy-2-hydroxypropoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H58 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L21 ANSWER 3 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216168-01-3** REGISTRY
CN 1,2,3-Butanetriol, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H56 O5 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

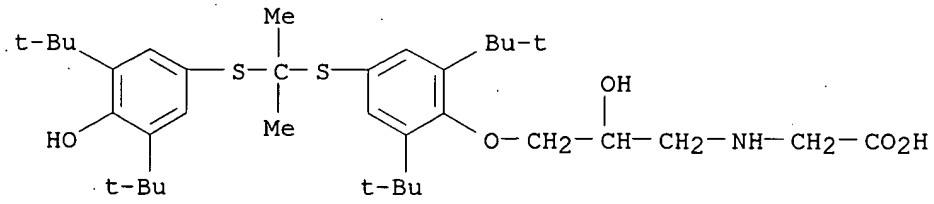


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L21 ANSWER 4 OF 11 REGISTRY COPYRIGHT 2003 ACS

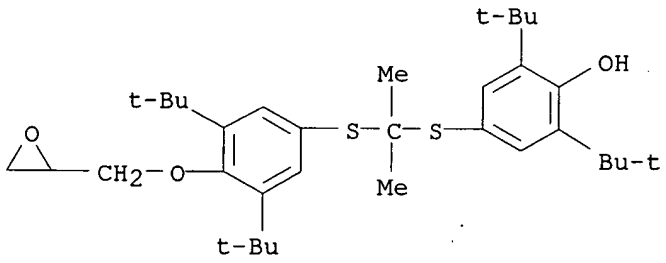
RN **216168-00-2** REGISTRY
CN Glycine, N-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H57 N O5 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1957 TO DATE)
2 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L21 ANSWER 5 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-99-6** REGISTRY
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(oxiranylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C34 H52 O3 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

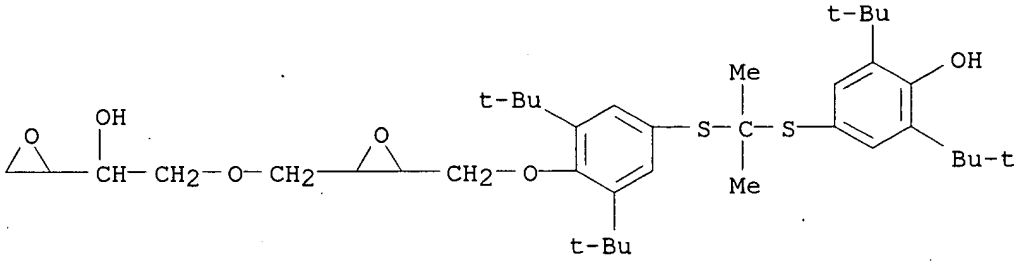


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L21 ANSWER 6 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-98-5** REGISTRY
CN Oxiranemethanol, .alpha.-[[[3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]oxiranyl]methoxy]methyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C39 H60 O6 S2

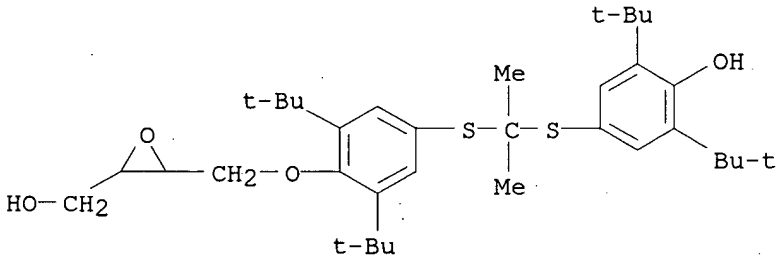
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

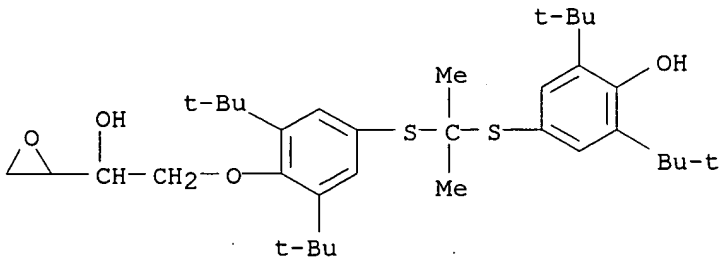
L21 ANSWER 7 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-97-4** REGISTRY
CN Oxiranemethanol, 3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H54 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

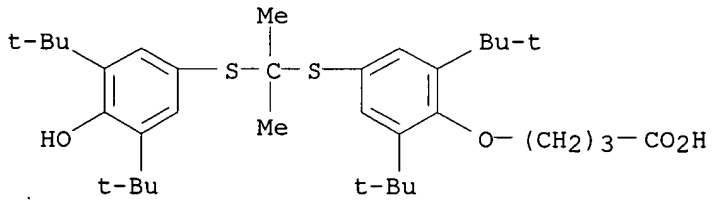
L21 ANSWER 8 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-96-3** REGISTRY
CN Oxiranemethanol, .alpha.-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H54 O4 S2
SR CA
LC STN Files: CA, CAPLUS, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1957 TO DATE)
1 REFERENCES IN FILE CAPLUS (1957 TO DATE)

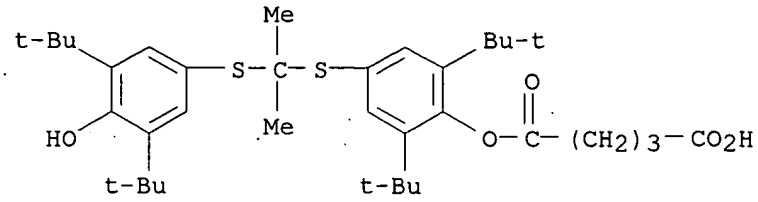
L21 ANSWER 9 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-95-2** REGISTRY
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C35 H54 O4 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

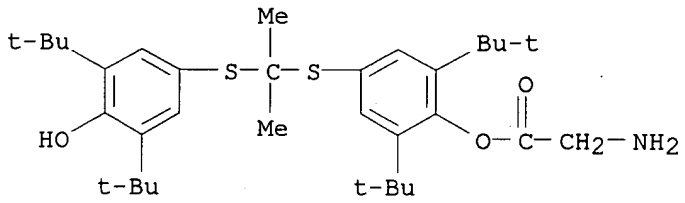
L21 ANSWER 10 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-94-1** REGISTRY
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C36 H54 O5 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

6 REFERENCES IN FILE CA (1957 TO DATE)
6 REFERENCES IN FILE CAPLUS (1957 TO DATE)

L21 ANSWER 11 OF 11 REGISTRY COPYRIGHT 2003 ACS
RN **216167-93-0** REGISTRY
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C33 H51 N O3 S2
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1957 TO DATE)
3 REFERENCES IN FILE CAPLUS (1957 TO DATE)

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	33.94	377.54
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
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FILE COVERS 1907 - 25 May 2003 VOL 138 ISS 22
FILE LAST UPDATED: 23 May 2003 (20030523/ED)

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s 216167-93-0
REGlstRY INITIATED
Substance data SEARCH and crossover from CAS REGISTRY in progress...
Use DISPLAY HITSTR (or FHITSTR) to directly view retrieved structures.

L23 3 L22

=> d ibib abs 3

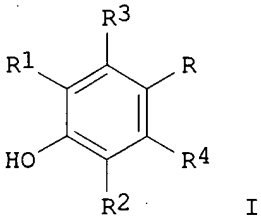
L23 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874851	A1	19981208	AU 1998-74851	19980514
AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6121319	A	20000919	US 1998-78935	19980514
BR 9809819	A	20010918	BR 1998-9819	19980514

JP 2002503227	T2	20020129	JP 1998-549502		19980514
NO 9905544	A	20000110	NO 1999-5544		19991112
MX 9910402	A	20000630	MX 1999-10402		19991112
PRIORITY APPLN. INFO.:			US 1997-47020P	P	19970514
			WO 1998-US9781	W	19980514

OTHER SOURCE(S): MARPAT 130:13646

GI



I

AB Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SO0-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepd. Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

=> d hitstr

L23 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2003 ACS

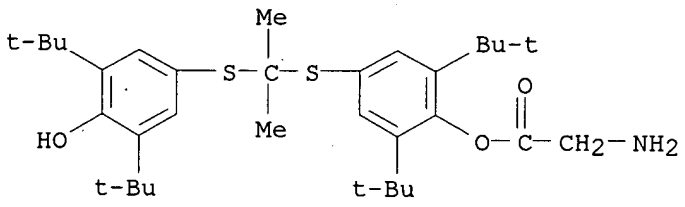
IT **216167-93-0**

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(probucol derivs. for treatment of transplant rejection)

RN 216167-93-0 CAPLUS

CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



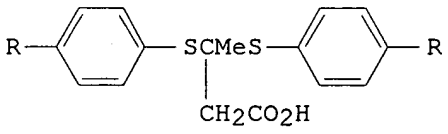
=> s l3

L24 14 L3

=> d ibib abs hitstr 14

L24 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1986:28675 CAPLUS
DOCUMENT NUMBER: 104:28675
TITLE: New derivatives of clofibrate and probucol. Preliminary studies on hypolipemic activity
AUTHOR(S): De Meglio, P.; Ravenna, F.; Manzardo, S.; Gentili, P.; Riva, M.
CORPORATE SOURCE: Lab. Ric., Maggioni Farmaceutici S.p.A., Milan, Italy
SOURCE: Farmaco, Edizione Scientifica (1985), 40(11), 833-44
CODEN: FRPSAX; ISSN: 0430-0920
DOCUMENT TYPE: Journal
LANGUAGE: Italian
GI

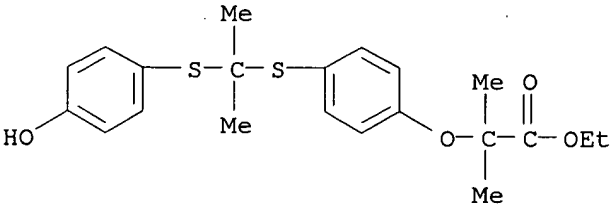


I

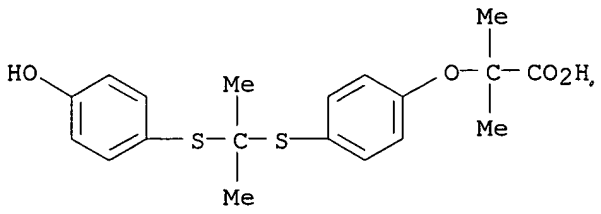
AB Two types of compds. were prepd: (a) clofibrate analogs without the Cl atom and contg. a cyclohexyl or phenylcyclohexyl group in place of the Ph group, or contg. the hydroxybutyrate group of clofibrate attached to the 4- and 4'-positions of a biphenyl moiety; (b) probucol analogs in which the hydroxybutyrate group of clofibrate was attached to one or both of the arom. rings of probucol. Some compds. of both classes had hypolipemic activity in mice and rats; one of these, I [99661-82-2], a probucol analog, also did not produce the hepatomegaly assocd. as a side effect with the other compds. and is suitable for further testing.

IT **99661-86-6P 99661-87-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(prepn. and hypolipemic activity of)

RN 99661-86-6 CAPLUS
CN Propanoic acid, 2-[4-[[1-[(4-hydroxyphenyl)thio]-1-methylethyl]thio]phenoxy]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)



RN 99661-87-7 CAPLUS
CN Propanoic acid, 2-[4-[[1-[(4-hydroxyphenyl)thio]-1-methylethyl]thio]phenoxy]-2-methyl- (9CI) (CA INDEX NAME)



=> d ibib abs hitstr 13

L24 ANSWER 13 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:558965 CAPLUS
DOCUMENT NUMBER: 115:158965
TITLE: Preparation of 6-aryloxymethyl-4-hydroxytetrahydropyran-2-ones and the corresponding dihydroxycarboxylic acids and salts as HMG-CoA reductase inhibitors and biological antioxidants
INVENTOR(S): Jendralla, Heiner; Wess, Guenther; Kesseler, Kurt; Beck, Gerhard
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Eur. Pat. Appl., 59 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 418648	A1	19910327	EP 1990-117043	19900905
EP 418648	B1	19950111		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DE 3929913	A1	19910404	DE 1989-3929913	19890908
ES 2067609	T3	19950401	ES 1990-117043	19900905
US 5294724	A	19940315	US 1990-578240	19900906
CA 2024849	AA	19910309	CA 1990-2024849	19900907
CA 2024849	C	20020101		
NO 9003911	A	19910311	NO 1990-3911	19900907
NO 175002	B	19940509		
NO 175002	C	19940817		
AU 9062277	A1	19910314	AU 1990-62277	19900907
AU 629977	B2	19921015		
JP 03099075	A2	19910424	JP 1990-235998	19900907
JP 3053417	B2	20000619		
ZA 9007134	A	19910626	ZA 1990-7134	19900907
HU 56085	A2	19910729	HU 1990-5827	19900907
HU 212103	B	19960228		
IL 95599	A1	19990714	IL 1990-95599	19901006
FI 9603396	A	19960830	FI 1996-3396	19960830

PRIORITY APPLN. INFO.: DE 1989-3929913 A 19890908
FI 1990-4395 A 19900906
OTHER SOURCE(S): MARPAT 115:158965
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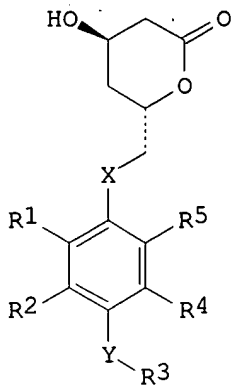

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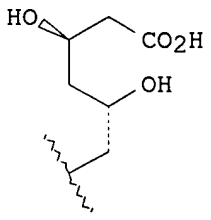

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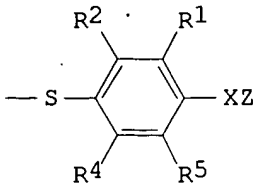

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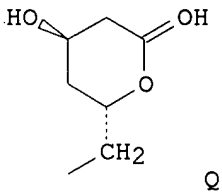

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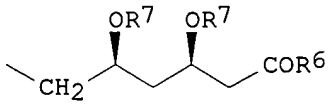


Q2

AB Title compds. [I; X, Y = O, S; R1, R5 = Me2CH, cyclopropyl, (un)substituted Ph; R2, R4 = H, Me2CH, cyclopropyl, (un)substituted Ph; R3 = H, Me, Et, C3-8 alkyl optionally substituted by thiophenyl residue Q in which X, R1, R2, R4, R5 are as above, Z = H, pharmaceutically compatible cation, hydroxypyranyl residue Q1, dihydroxyhexanoic acid residue Q2 (R6 = OH, R7 = H), C3-8 cycloalkyl, (un)substituted Ph, acetyl (when Y = O)], open chain carboxylic acid forms (II; R1-R5, X, Y as defined) and their pharmaceutically compatible esters or salts with bases, useful as antihypercholesteremics and for the prophylaxis and treatment of arteriosclerosis, were prepd. Reaction of 2-(p-fluorophenyl)-4-isothiocyanato-6-isopropylphenol (prepn. given) with 4-FC6H4MgBr gave 100% phenylthiophenol deriv. which underwent a substitution reaction (74.0%) with 6-mesyloxydihydroxyhexanoate tert-Bu ester acetonide Q2OSO2Me (R6 = CMe3, R7R7 = CMe2). The product was deprotected (80.8%) and sapond. to give 93% the title compd. 3(R),5(S)-dihydroxy-6-[2-p-fluorophenyl-4-p-fluorophenylthio-6-isopropyl)phenoxy]hexanoate Na salt (III). The latter in vitro inhibited rat liver microsomal HMG CoA reductase with IC50 of 6 .times. 10-9 M, vs. 8 .times. 10-9 M for mevinolin Na salt.

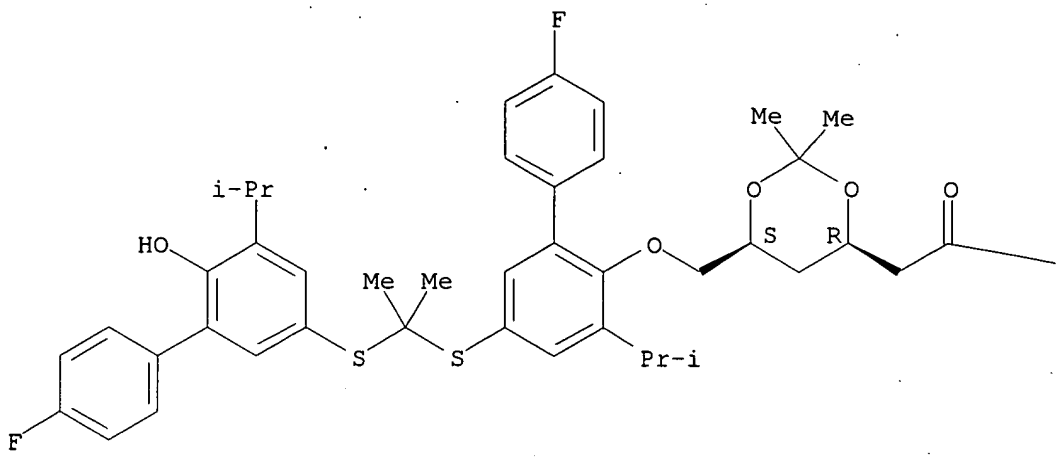
IT **136006-85-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection of, in prepn. of drug)

RN 136006-85-4 CAPLUS

CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-3,5-O-(1-methylethylidene)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—OBu-t

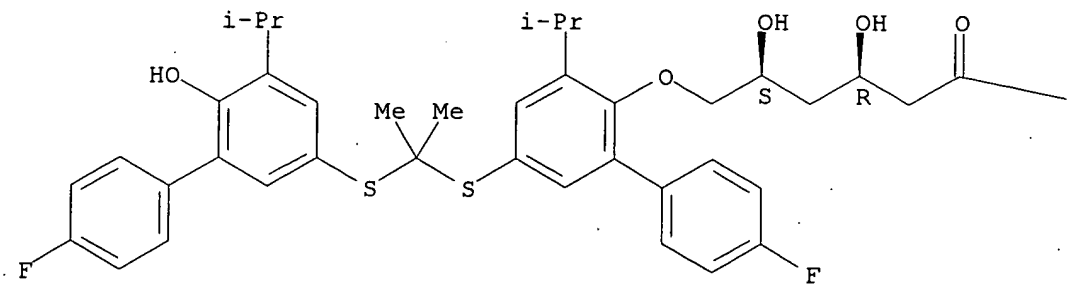
IT **136006-89-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and sapon. of, in prepn. of drug)

RN 136006-89-8 CAPLUS

CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

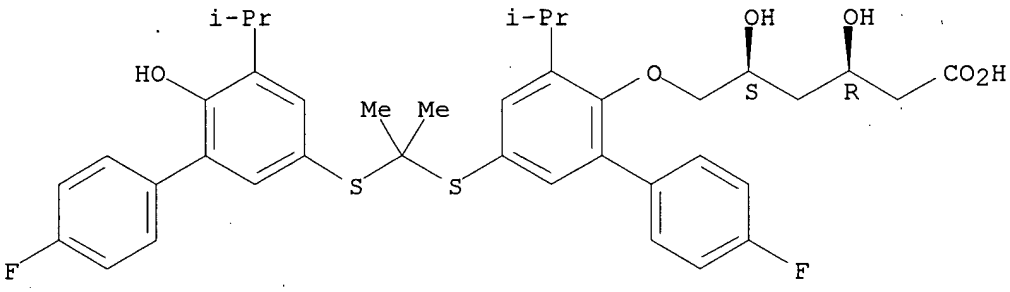
PAGE 1-A



—OBu-t

IT **136315-18-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as HMG-CoA reductase inhibitor and biol. antioxidant)
RN 136315-18-9 CAPLUS
CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-, sodium salt (9CI) (CA INDEX NAME)

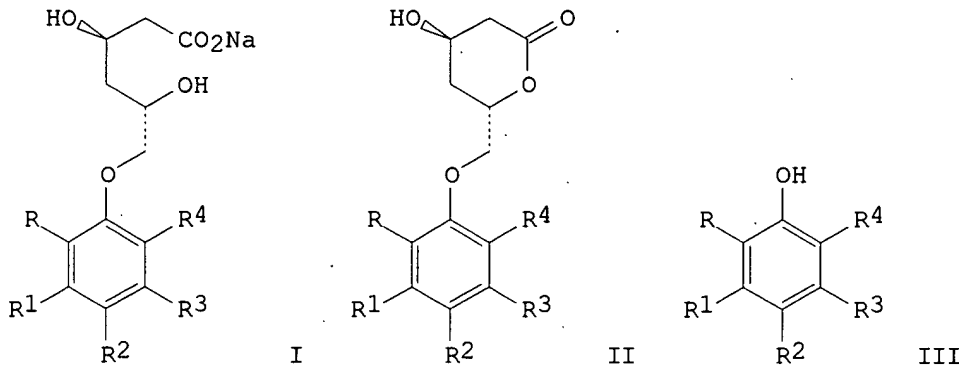
Absolute stereochemistry.



●x Na

=> d ibib abs hitstr 12

L24 ANSWER 12 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1991:583017 CAPLUS
DOCUMENT NUMBER: 115:183017
TITLE: Synthesis and biological activity of new HMG-CoA reductase inhibitors. 3. Lactones of 6-phenoxy-3,5-dihydroxyhexanoic acids
AUTHOR(S): Jendralla, H.; Granzer, E.; Von Kerekjarto, B.; Krause, R.; Schacht, U.; Baader, E.; Bartmann, W.; Beck, G.; Bergmann, A.; et al.
CORPORATE SOURCE: Hoechst A.-G., Frankfurt/Main, D-6230/80, Germany
SOURCE: Journal of Medicinal Chemistry (1991), 34(10), 2962-83
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



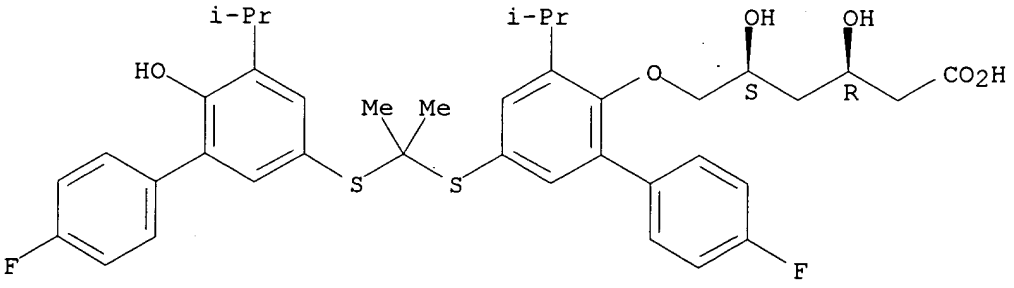
AB Forty three optically active sodium dihydroxyphenoxylexanoates, e.g., I [R = Cl, Me, cyclopentyl, CHMe2; R1 = H, R2 = Cl, Me, CHMe2, CMe3, 4-C6H4F; R3 = H, OCH2C6H4F-4; R4 = CH(C6H4F-4)2, CHMe(C6H4F-4), (CH2)2OC6H4F-4] and the corresponding lactones II were prepd. from the resp. phenols III. A no. of the HMG-CoA reductase inhibitors I exceeded the activity of mevinolin in vitro. Selected lactones II effectively inhibited hepatic de novo cholesterol synthesis in rats in vivo. After administration to rabbits, I (R = CHMe2, R1 = R3 = H, R2 = SC6H4F-4, R4 = C6H4F-4) notably reduced plasma cholesterol levels more potently than mevinolin. Each of these compds. had only moderate activity after administration to dogs. One compd., a hybrid of the structural elements of probucol and HMG-CoA reductase inhibitors, after administration to rats decreased serum lipoproteins and increased HDL/LDL ratio better then probucol. HMG-CoA reductase inhibitor I (R = R1 = R3 = CHMe2, R2 = OAc, R4 = C6H4F-4), and 2 phenolic building blocks inhibited LDL oxidn. in vitro. Chem. structure-activity relationships and the pharmacol. profile of phenoxy-type inhibitors I diverged from those of known HMG-CoA reductase inhibitors.

IT **136034-02-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and HMG-CoA reductase inhibition by)

RN 136034-02-1 CAPLUS

CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-, disodium salt (9CI) (CA INDEX NAME)

Absolute stereochemistry.

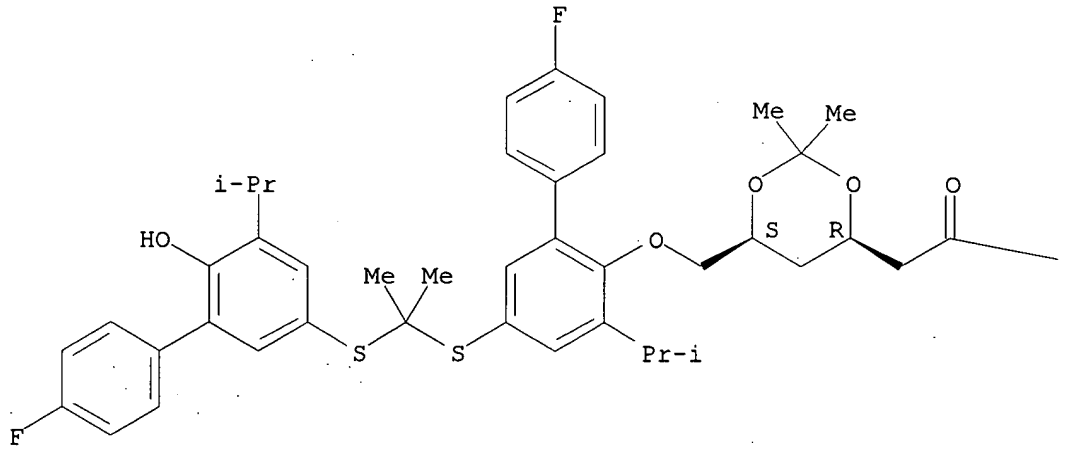


●2 Na

IT **136006-85-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and deprotection of)
RN 136006-85-4 CAPLUS
CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-3,5-O-(1-methylethylidene)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



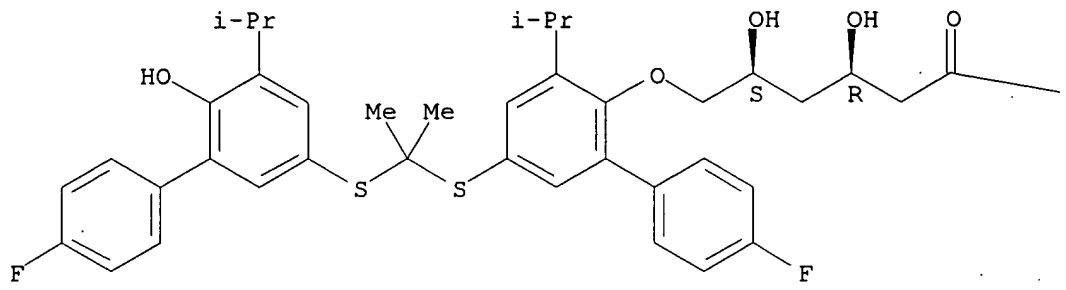
PAGE 1-B

OBu-t

IT **136006-89-8P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and sapon. of)
RN 136006-89-8 CAPLUS
CN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

—OBu-t

=> d ibib abs hitstr 11

L24 ANSWER 11 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761806 CAPLUS
DOCUMENT NUMBER: 130:20572
TITLE: Monoesters of probucol for the treatment of cardiovascular and inflammatory disease
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851289	A2	19981119	WO 1998-US9773	19980514
WO 9851289	A3	19990514		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9875711	A1	19981208	AU 1998-75711	19980514
AU 747801	B2	20020523		
EP 981343	A2	20000301	EP 1998-923411	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
BR 9809793	A	20000627	BR 1998-9793	19980514
NZ 501069	A	20000728	NZ 1997-501069	19980514
US 6121319	A	20000919	US 1998-78935	19980514
JP 2001524986	T2	20011204	JP 1998-549498	19980514
NO 9905543	A	20000110	NO 1999-5543	19991112

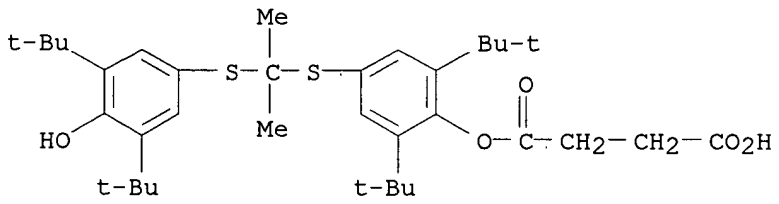
MX 9910404 A 20000630 MX 1999-10404 19991112
PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9773 W 19980514

AB This invention is a method and compn. for the inhibition of VCAM-1, and in particular for the treatment of cardiovascular or inflammatory disease, including atherosclerosis, that includes the administration of an effective amt. of an ester of probucol. Rabbits were fed high fat chow (0.5% cholesterol and 3% coconut oil) contg. 0.5% probucol monosuccinate (I) for 3wk. I caused a significant redn. in all lipoprotein fractions.

IT **216167-82-7**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(monoesters of probucol for treatment of cardiovascular and inflammatory disease)

RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



=> d ibib abs hitstr 10

L24 ANSWER 10 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874851	A1	19981208	AU 1998-74851	19980514
AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

US 6121319	A	20000919	US 1998-78935		19980514
BR 9809819	A	20010918	BR 1998-9819		19980514
JP 2002503227	T2	20020129	JP 1998-549502		19980514
NO 9905544	A	20000110	NO 1999-5544		19991112
MX 9910402	A	20000630	MX 1999-10402		19991112
PRIORITY APPLN. INFO.:			US 1997-47020P	P	19970514
			WO 1998-US9781	W	19980514

OTHER SOURCE(S): MARPAT 130:13646

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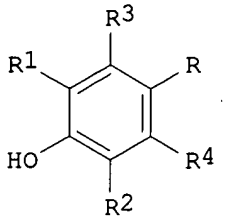


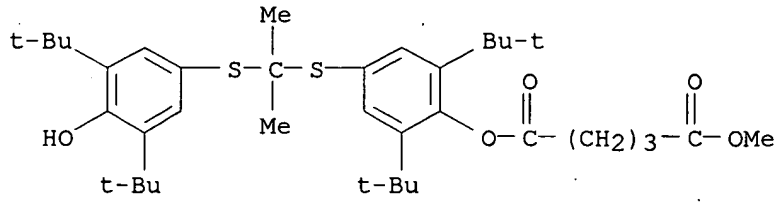
I

AB Title compds. [e.g., I; R = Z1Z2R5; R1,R2 = (un)substituted (cyclo)alkyl, -(hetero)aryl, etc.; R3,R4 = any group that does not otherwise adversely affect (sic) the desired properties of the mol. including H, halogen, or R1 (sic); R5 = (di)(alkyl)amino, alkyl, alkoxy(carbonyl), (hetero)aryl, etc.; Z1 = O SO0-2, NH, CH2; Z2 = bond, alkylene(oxy) aryleneoxy, etc.] were prepd. Thus, 4-(BrCH2)C6H4CH2CO2H was thioetherified by 4-mercapto-2,6-di-tert-butylphenol to give I [R = SCH2C6H4(CH2CO2H)-4, R1 = R2 = CMe3, R3 = R4 = H]. Data for biol. activity of I were given.

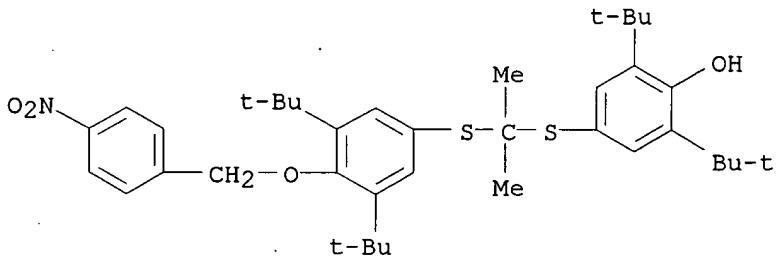
IT **216167-80-5P 216167-81-6P 216167-82-7P**
216167-83-8P 216167-84-9P 216167-85-0P
216167-86-1P 216167-88-3P 216167-89-4P
216167-90-7P 216167-91-8P 216167-92-9P
216167-93-0P 216167-94-1P 216167-95-2P
216167-96-3P 216167-97-4P 216167-98-5P
216167-99-6P 216168-00-2P 216168-01-3P
216168-02-4P 216168-03-5P 216168-05-7P
216168-07-9P 216168-14-8P 216168-18-2P
216168-20-6P 216168-22-8P 216168-24-0P
216168-26-2P 216168-27-3P 216168-28-4P
216168-29-5P 216168-30-8P 216168-31-9P
216168-32-0P 216168-33-1P 216168-34-2P
216168-35-3P 216168-36-4P 216168-37-5P
216168-38-6P 216168-39-7P 216168-41-1P
216168-42-2P 216168-43-3P 216168-44-4P
216168-47-7P 216168-48-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

RN 216167-80-5 CAPLUS

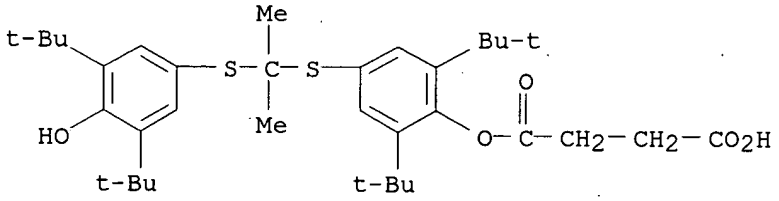
CN Pentanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



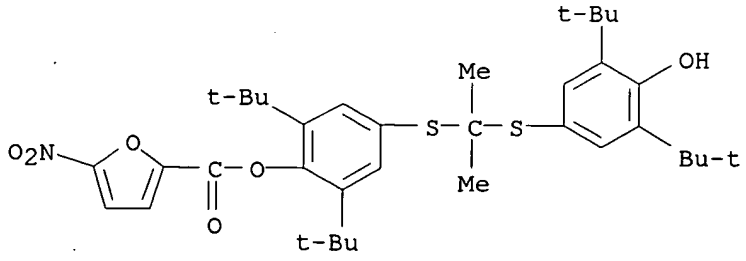
RN 216167-81-6 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-[(4-nitrophenyl)methoxy]phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



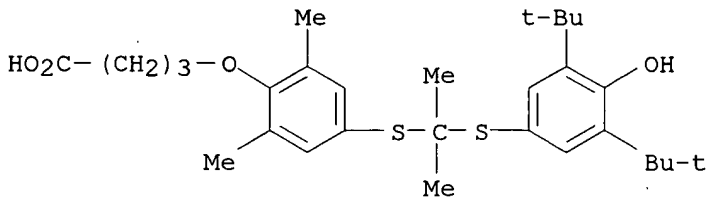
RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



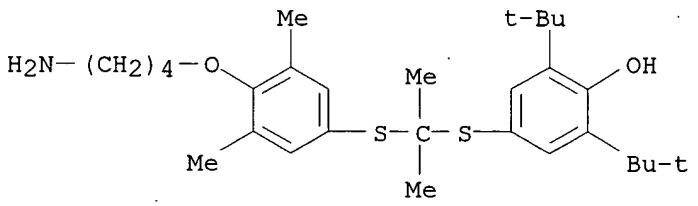
RN 216167-83-8 CAPLUS
CN 2-Furancarboxylic acid, 5-nitro-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



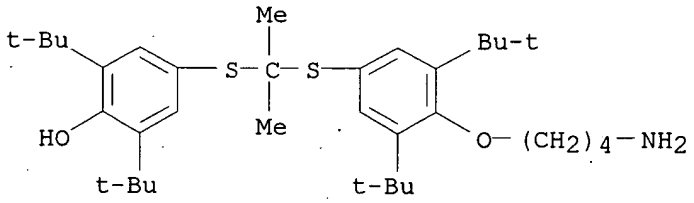
RN 216167-84-9 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)



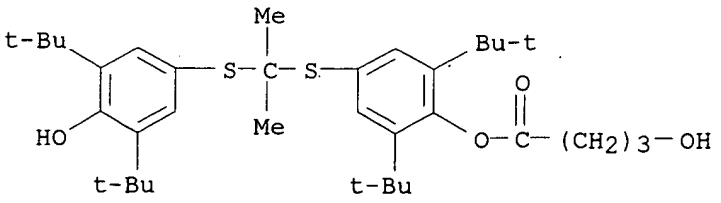
RN 216167-85-0 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-dimethylphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



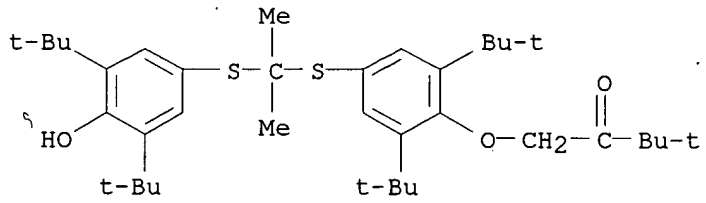
RN 216167-86-1 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



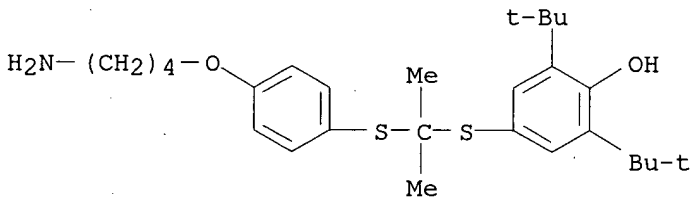
RN 216167-88-3 CAPLUS
CN Butanoic acid, 4-hydroxy-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



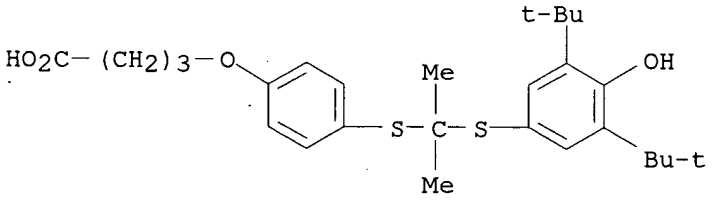
RN 216167-89-4 CAPLUS
CN 2-Butanone, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-3,3-dimethyl- (9CI) (CA INDEX NAME)



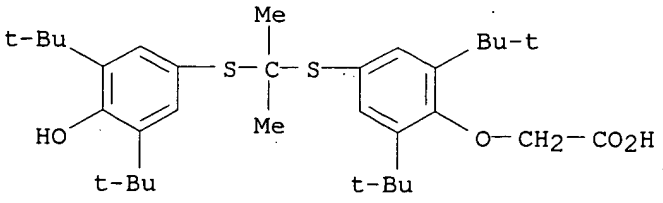
RN 216167-90-7 CAPLUS
CN Phenol, 4-[[1-[[4-(4-aminobutoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



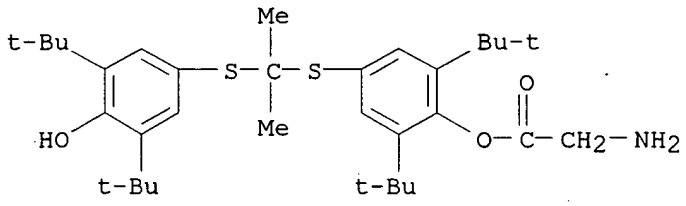
RN 216167-91-8 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



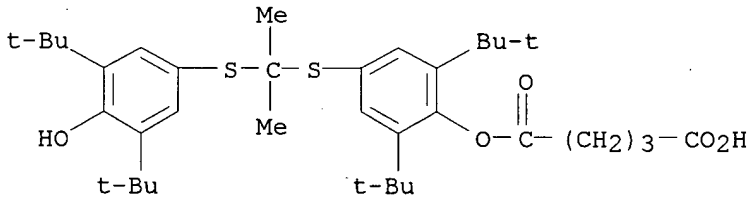
RN 216167-92-9 CAPLUS
CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



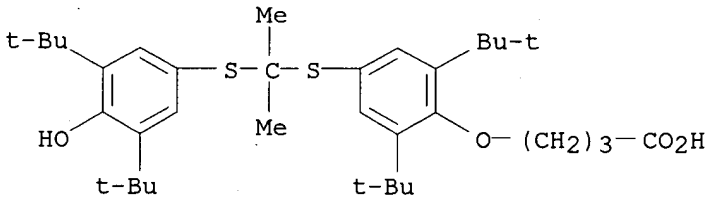
RN 216167-93-0 CAPLUS
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



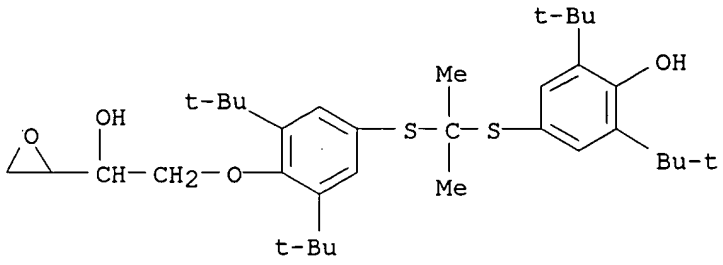
RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



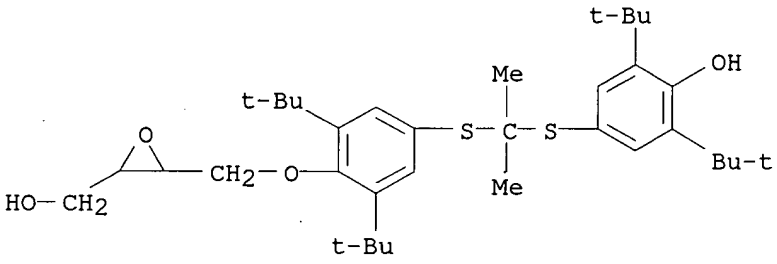
RN 216167-95-2 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



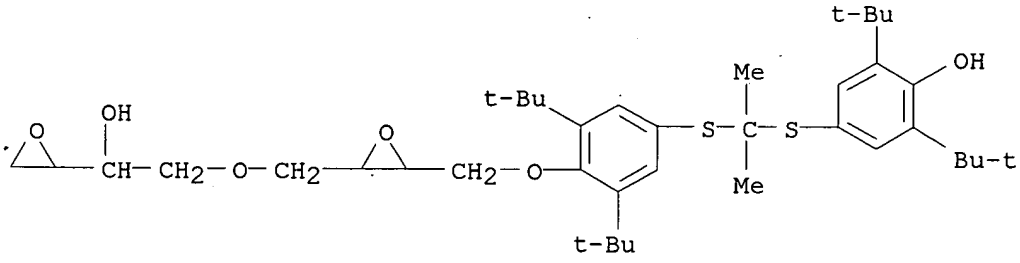
RN 216167-96-3 CAPLUS
CN Oxiranemethanol, .alpha.-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



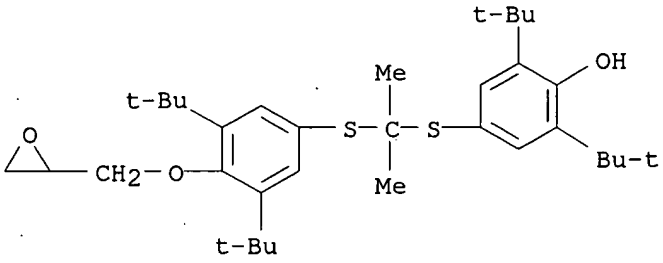
RN 216167-97-4 CAPLUS
CN Oxiranemethanol, 3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)



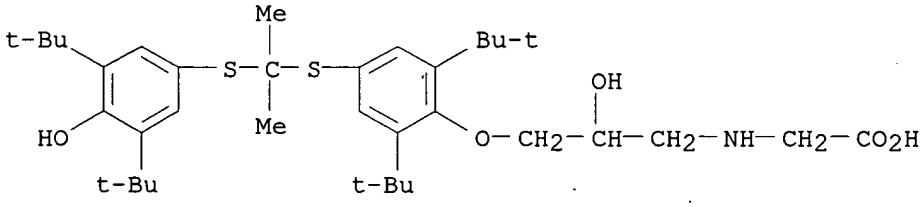
RN 216167-98-5 CAPLUS
CN Oxiranemethanol, .alpha.-[[[3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]oxiranyl]methoxy]methyl]- (9CI) (CA INDEX NAME)



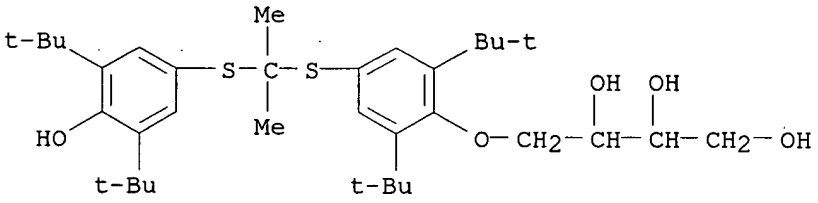
RN 216167-99-6 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(oxiranylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



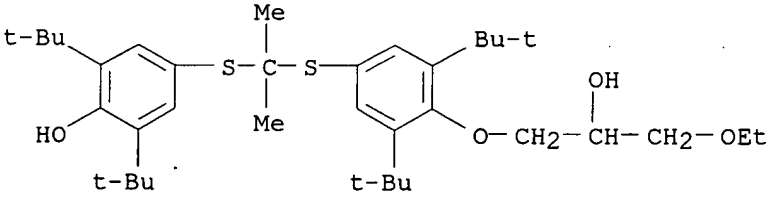
RN 216168-00-2 CAPLUS
CN Glycine, N-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)



RN 216168-01-3 CAPLUS
CN 1,2,3-Butanetriol, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

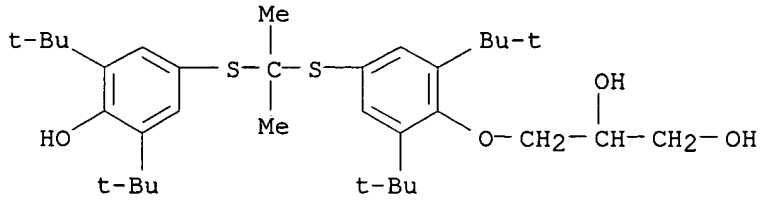


RN 216168-02-4 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-ethoxy-2-hydroxypropoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

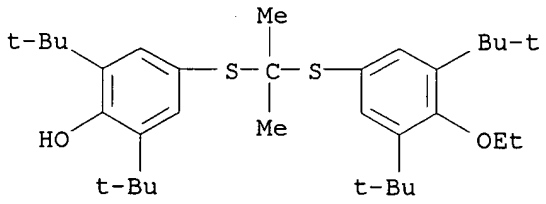


RN 216168-03-5 CAPLUS
CN 1,2-Propanediol, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-

hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-
(9CI) (CA INDEX NAME)

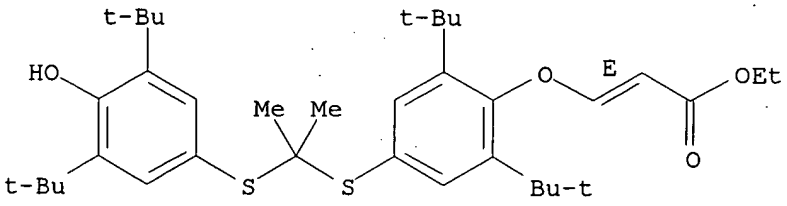


RN 216168-05-7 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-ethoxyphenyl]thio]-1-
methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

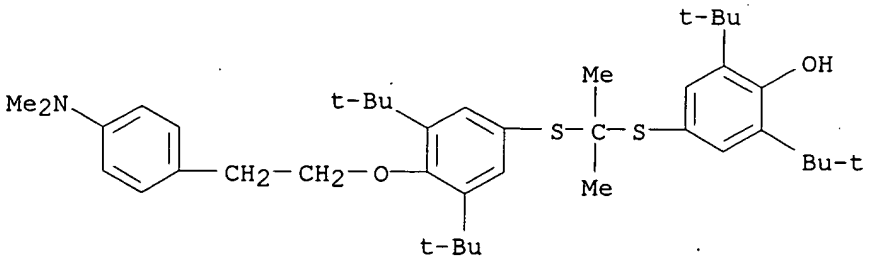


RN 216168-07-9 CAPLUS
CN 2-Propenoic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-
hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-
, ethyl ester, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 216168-14-8 CAPLUS
CN Phenol, 4-[[1-[[4-[2-[4-(dimethylamino)phenyl]ethoxy]-3,5-bis(1,1-
dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)-
(9CI) (CA INDEX NAME)



RN 216168-18-2 CAPLUS
CN L-Arginine, N2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-1,4-dioxobutyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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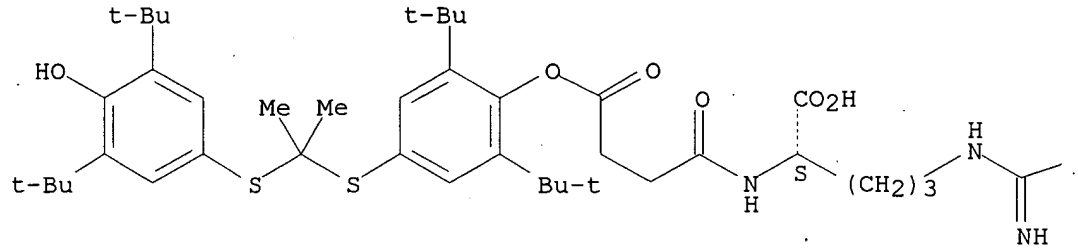

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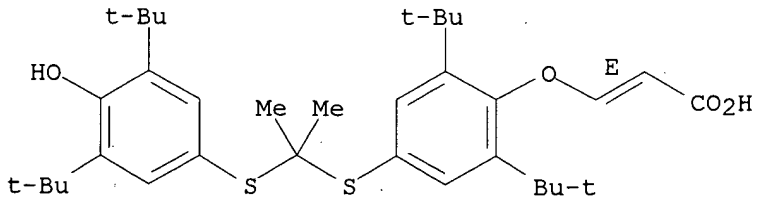
NH2

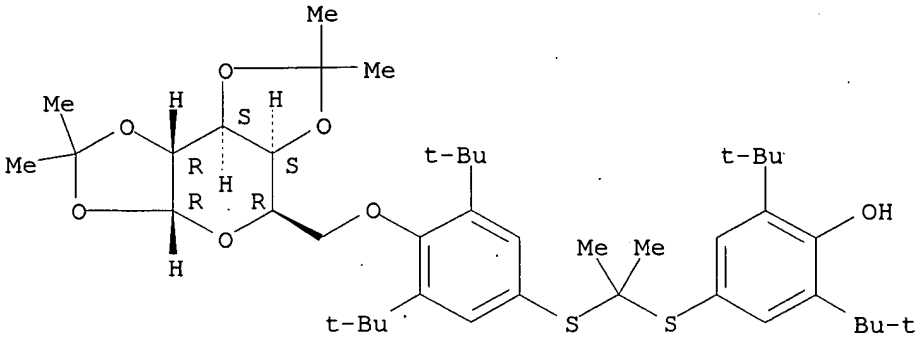
RN 216168-20-6 CAPLUS
CN 2-Propenoic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.

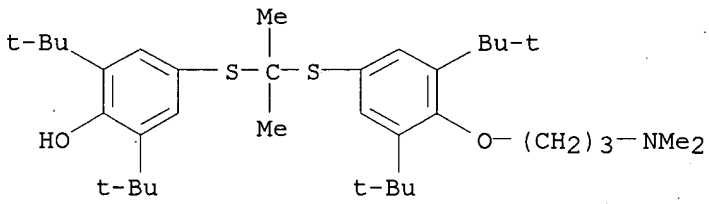


RN 216168-22-8 CAPLUS
CN .alpha.-D-Galactopyranose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]-1,2:3,4-bis-O-(1-methylethylidene)- (9CI) (CA INDEX NAME)

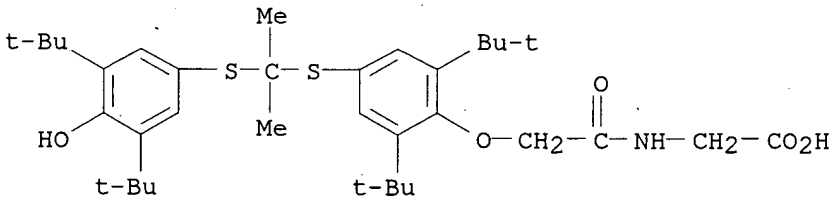
Absolute stereochemistry.



RN 216168-24-0 CAPLUS
CN Phenol, 4-[[1-[[4-[3-(dimethylamino)propoxy]-3,5-bis(1,1-dimethylethyl)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

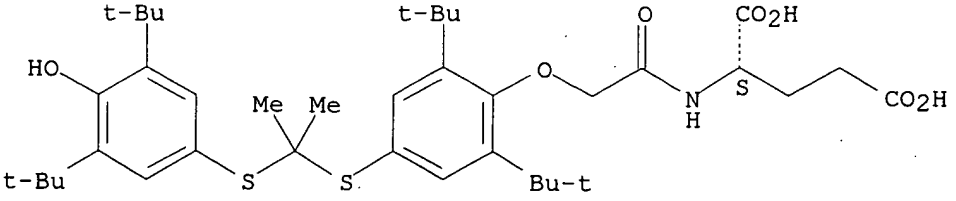


RN 216168-26-2 CAPLUS
CN Glycine, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]- (9CI) (CA INDEX NAME)



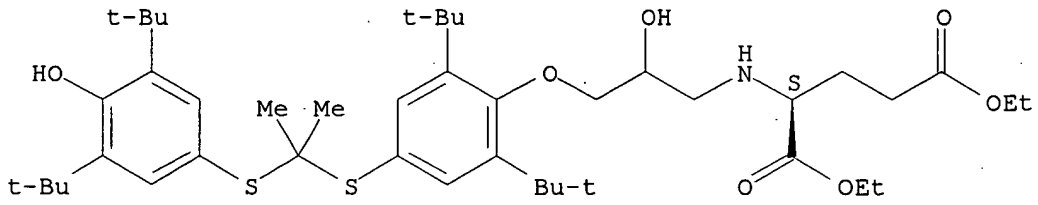
RN 216168-27-3 CAPLUS
CN L-Glutamic acid, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

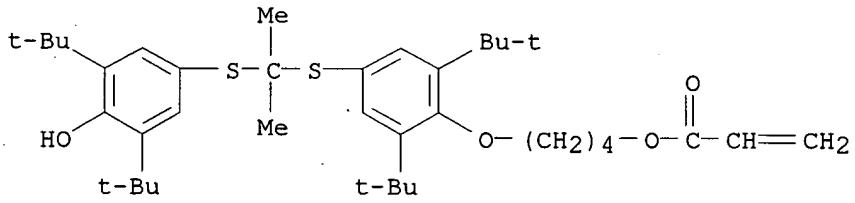


RN 216168-28-4 CAPLUS
CN L-Glutamic acid, N-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]-, diethyl ester (9CI) (CA INDEX NAME)

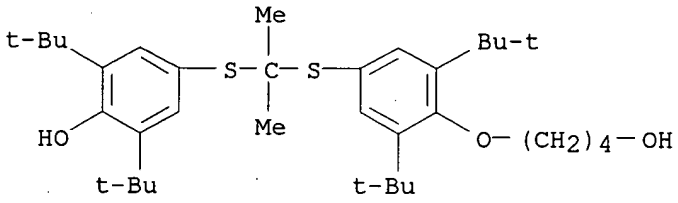
Absolute stereochemistry.



RN 216168-29-5 CAPLUS
CN 2-Propenoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]butyl ester (9CI) (CA INDEX NAME)

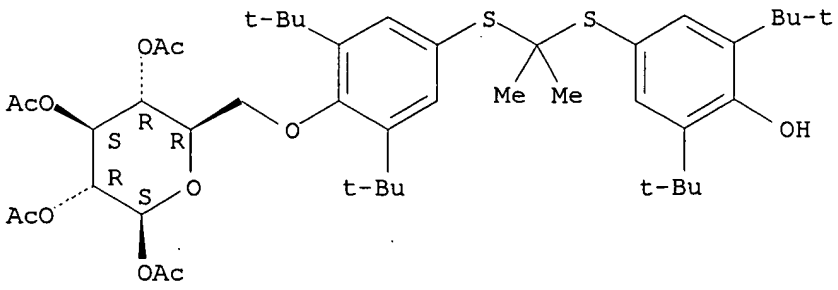


RN 216168-30-8 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(4-hydroxybutoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

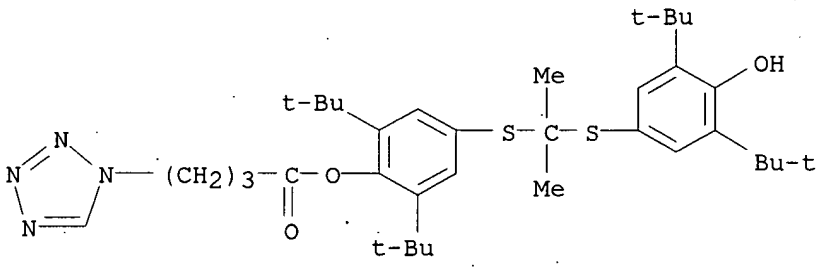


RN 216168-31-9 CAPLUS
CN .beta.-D-Glucopyranose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]-, 1,2,3,4-tetraacetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

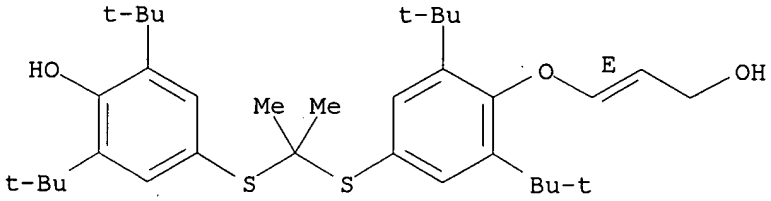


RN 216168-32-0 CAPLUS
CN 1H-Tetrazole-1-butanoic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



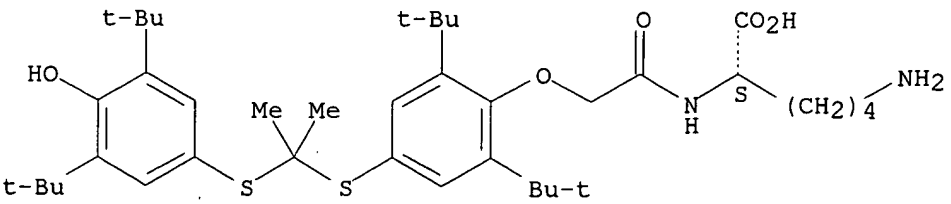
RN 216168-33-1 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-[[(1E)-3-hydroxy-1-propenyl]oxy]phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)

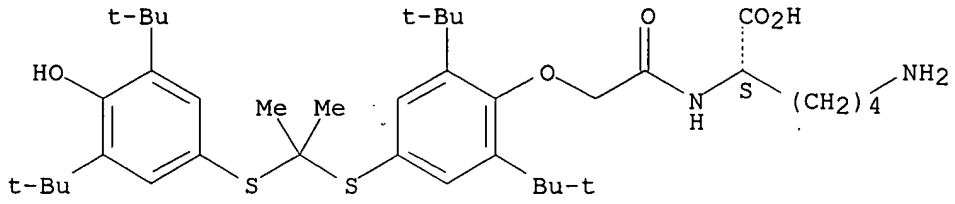
Double bond geometry as shown.



RN 216168-34-2 CAPLUS
CN L-Lysine, N2-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]- (9CI) (CA INDEX NAME)

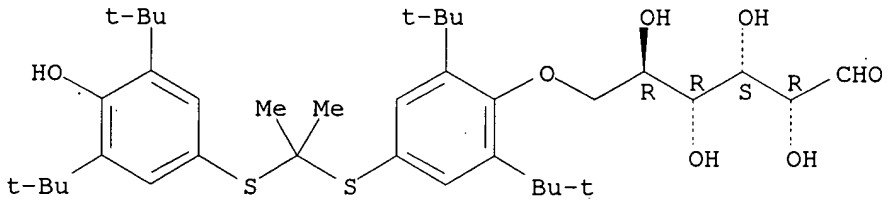
Absolute stereochemistry.





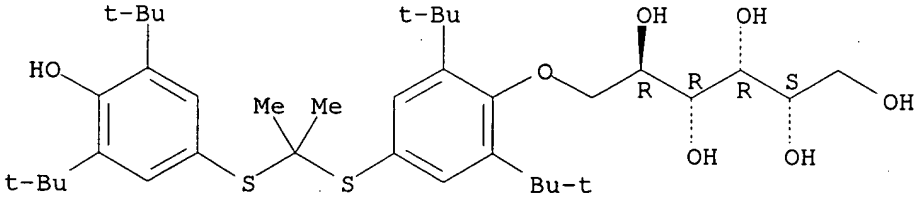
RN 216168-35-3 CAPLUS
CN D-Glucose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

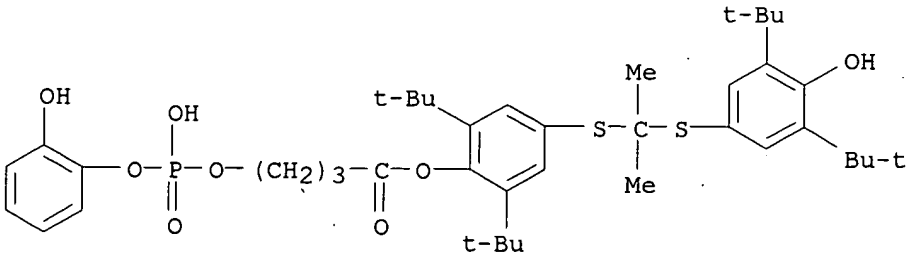


RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

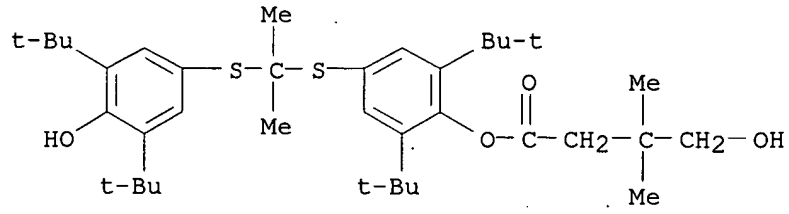
Absolute stereochemistry.



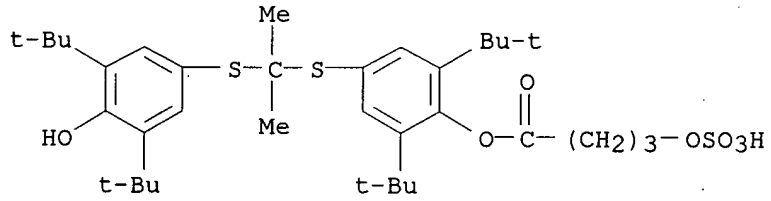
RN 216168-37-5 CAPLUS
CN Butanoic acid, 4-[[hydroxy(2-hydroxyphenoxy)phosphinyl]oxy]-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



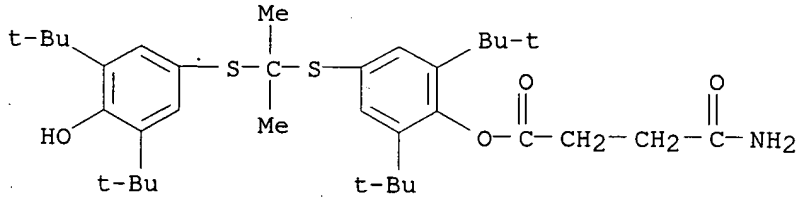
RN 216168-38-6 CAPLUS
CN Butanoic acid, 4-hydroxy-3,3-dimethyl-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



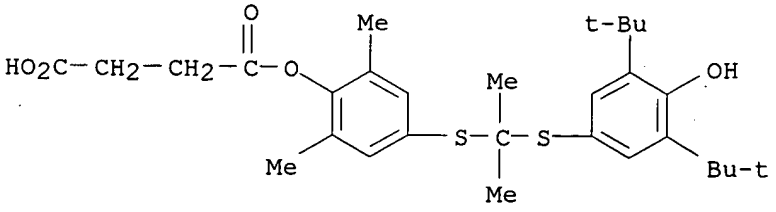
RN 216168-39-7 CAPLUS
CN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

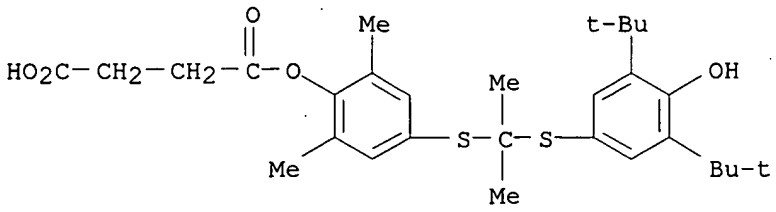


RN 216168-41-1 CAPLUS
CN Butanoic acid, 4-amino-4-oxo-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)

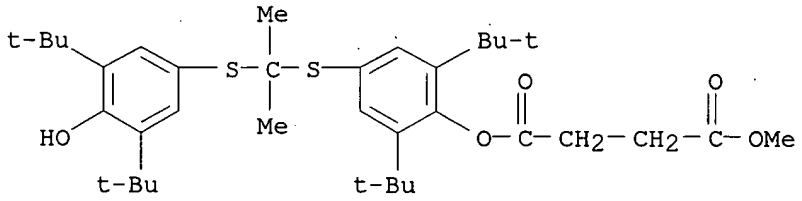


RN 216168-42-2 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenyl] ester (9CI) (CA INDEX NAME)

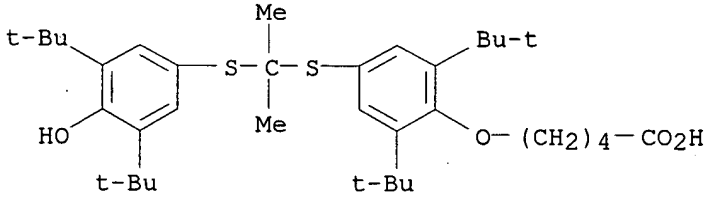




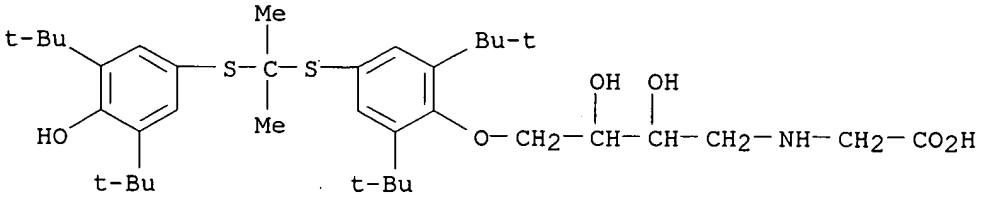
RN 216168-43-3 CAPLUS
CN Butanedioic acid, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl methyl ester (9CI) (CA INDEX NAME)



RN 216168-44-4 CAPLUS
CN Pentanoic acid, 5-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)

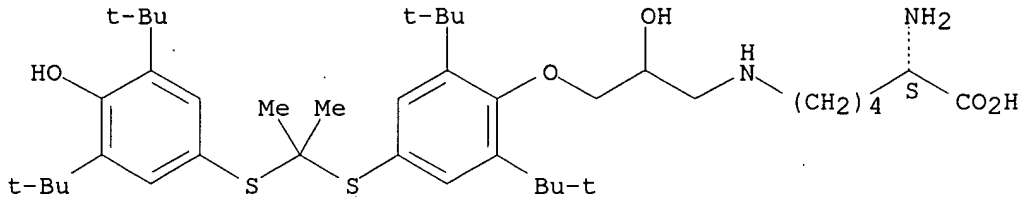


RN 216168-47-7 CAPLUS
CN Glycine, N-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2,3-dihydroxybutyl]- (9CI) (CA INDEX NAME)



RN 216168-48-8 CAPLUS
CN L-Lysine, N6-[3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl]- (9CI) (CA INDEX NAME)

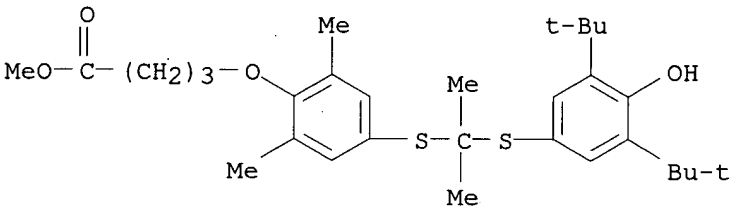
Absolute stereochemistry.



IT **216168-52-4P 216168-53-5P 216168-54-6P**
216168-55-7P 216168-57-9P 216168-58-0P
216168-59-1P 216168-60-4P 216168-61-5P
216168-62-6P 216168-63-7P 216168-66-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)

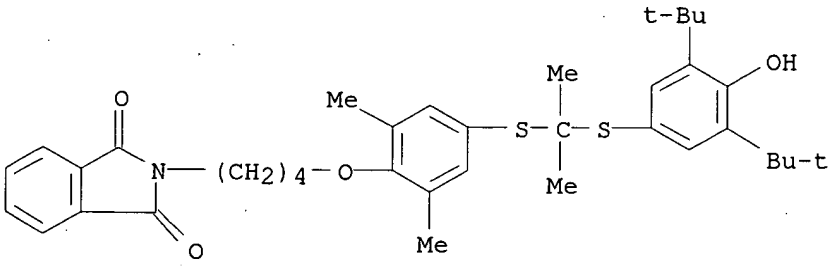
RN 216168-52-4 CAPLUS

CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]-, methyl ester (9CI) (CA INDEX NAME)



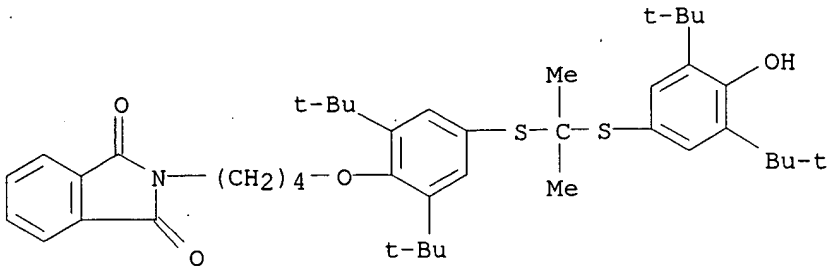
RN 216168-53-5 CAPLUS

CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]butyl]- (9CI) (CA INDEX NAME)

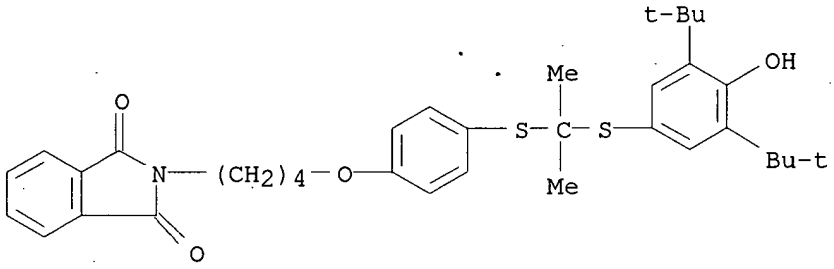


RN 216168-54-6 CAPLUS

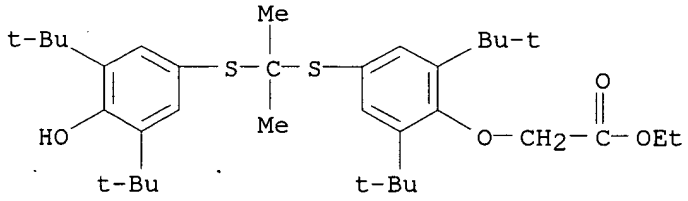
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]butyl]- (9CI) (CA INDEX NAME)



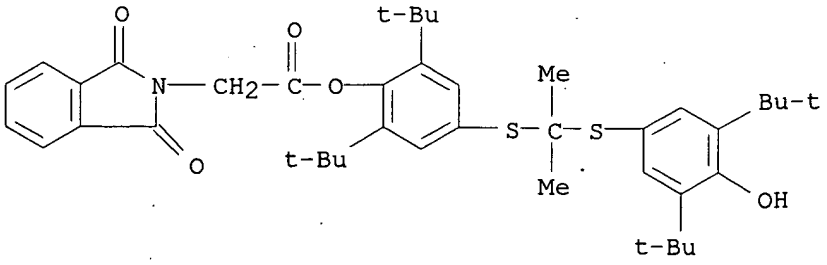
RN 216168-55-7 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, 2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]butyl]- (9CI) (CA INDEX NAME)



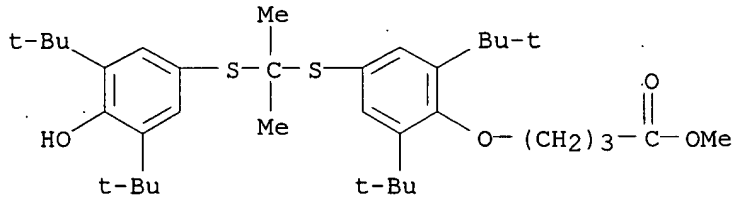
RN 216168-57-9 CAPLUS
CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, ethyl ester (9CI) (CA INDEX NAME)



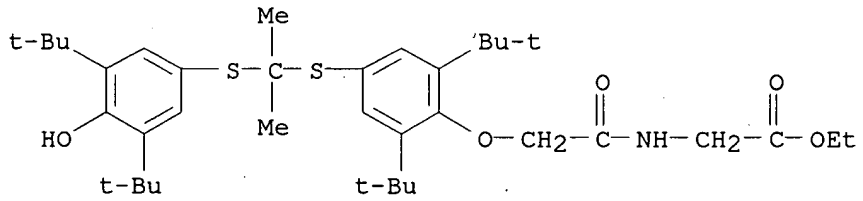
RN 216168-58-0 CAPLUS
CN 2H-Isoindole-2-acetic acid, 1,3-dihydro-1,3-dioxo-, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



RN 216168-59-1 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-, methyl ester (9CI) (CA INDEX NAME)

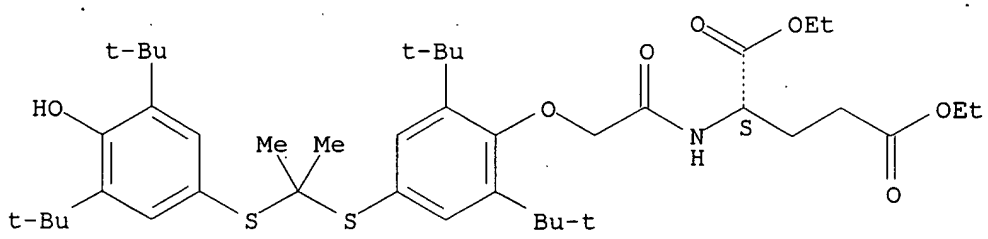


RN 216168-60-4 CAPLUS
CN Glycine, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]-, ethyl ester (9CI) (CA INDEX NAME)



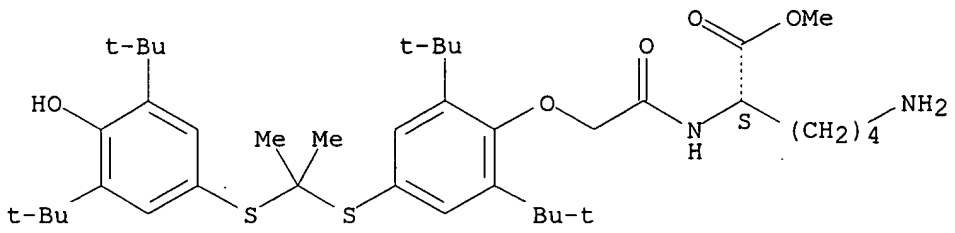
RN 216168-61-5 CAPLUS
CN L-Glutamic acid, N-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

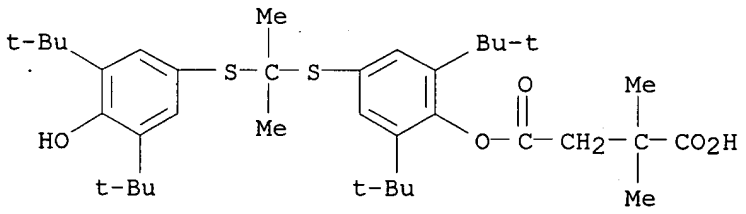


RN 216168-62-6 CAPLUS
CN L-Lysine, N2-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]acetyl]-, methyl ester (9CI) (CA INDEX NAME)

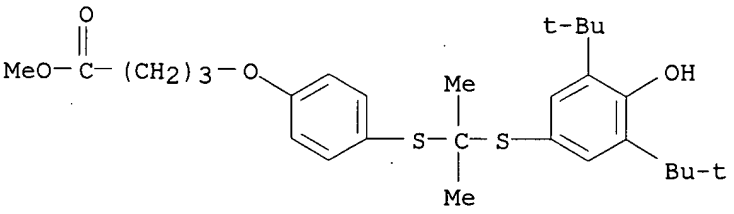
Absolute stereochemistry.



RN 216168-63-7 CAPLUS
CN Butanedioic acid, 2,2-dimethyl-, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 216168-66-0 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]-, methyl ester (9CI) (CA INDEX NAME)



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L24 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 1999:48609 CAPLUS
DOCUMENT NUMBER: 130:119591
TITLE: Antioxidant enhancement of therapy for hyperproliferative conditions
INVENTOR(S): Chinery, Rebecca; Beauchamp, R. Daniel; Coffey, Robert J.; Medford, Russell M.; Wadsinski, Brian
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 112 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9901118	A2	19990114	WO 1998-US13750	19980701	
WO 9901118	A3	19990422			
W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9882827	A1	19990125	AU 1998-82827	19980701	
EP 1019034	A2	20000719	EP 1998-933078	19980701	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO					
JP 2002511878	T2	20020416	JP 1999-507360	19980701	
US 2001049349	A1	20011206	US 2001-779086	20010207	

PRIORITY APPLN. INFO.:

US 1997-886653	A	19970701
US 1997-967492	A	19971111
US 1998-108609	B1	19980701
WO 1998-US13750	W	19980701

OTHER SOURCE(S): MARPAT 130:119591

AB A method to enhance the cytotoxic activity of an antineoplastic drug comprises administering an effective amt. of the antineoplastic drug to a host exhibiting abnormal cell proliferation in combination with an effective cytotoxicity-increasing amt. of an antioxidant. The invention also includes a method to decrease the toxicity to an antineoplastic agent or increase the therapeutic index of an antineoplastic agent administered for the treatment of a solid growth of abnormally proliferating cells, comprising administering an antioxidant prior to, with, or following the antineoplastic treatment.

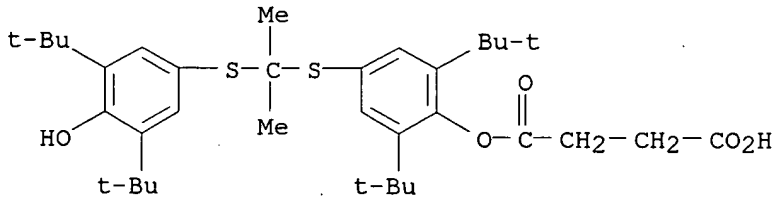
IT **216167-82-7 216167-94-1 219773-26-9 219773-27-0 219773-28-1 219773-29-2 219773-30-5**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antioxidant enhancement of therapy for hyperproliferative conditions)

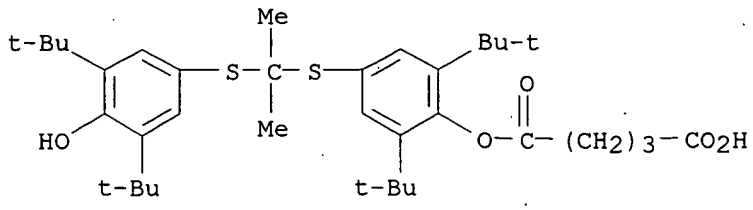
RN 216167-82-7 CAPLUS

CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

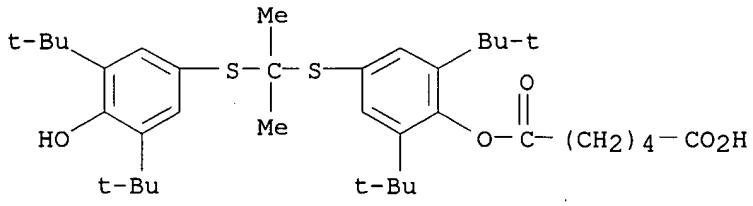


RN 216167-94-1 CAPLUS

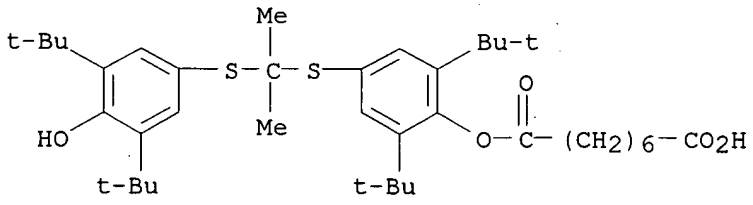
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



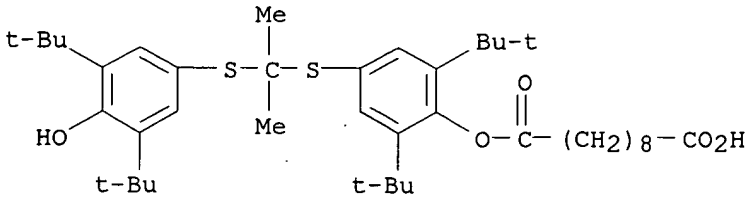
RN 219773-26-9 CAPLUS
CN Hexanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



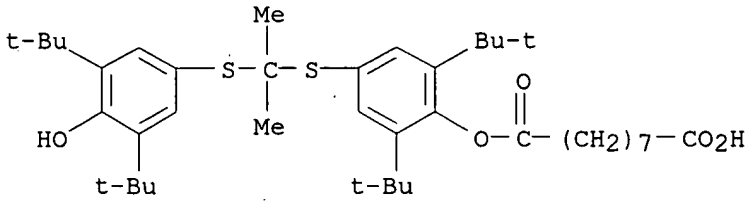
RN 219773-27-0 CAPLUS
CN Octanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 219773-28-1 CAPLUS
CN Decanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

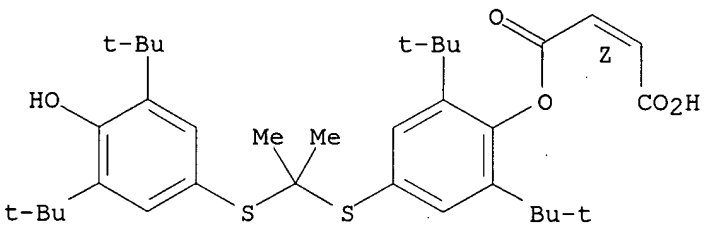


RN 219773-29-2 CAPLUS
CN Nonanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



RN 219773-30-5 CAPLUS
CN 2-Butenedioic acid (2Z)-, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



=> d ibib abs hitstr 8

L24 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2000:335659 CAPLUS
DOCUMENT NUMBER: 132:343330
TITLE: Methods and compositions to lower plasma cholesterol levels
INVENTOR(S): Medford, Russell M.; Saxena, Uday
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000028332	A1	20000518	WO 1999-US26519	19991109
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1137948	A1	20011004	EP 1999-962732	19991109
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO

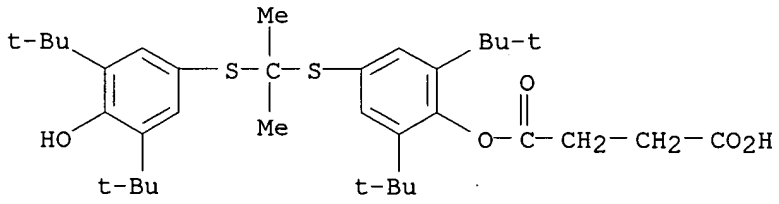
JP 2002529740 T2 20020910 JP 2000-581459 19991109

PRIORITY APPLN. INFO.: US 1998-107644P P 19981109
WO 1999-US26519 W 19991109

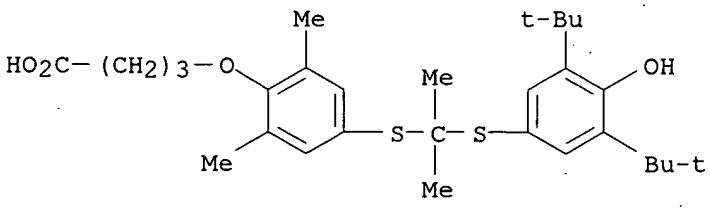
AB A method for detg. whether a compd. binds to a lipoprotein, e.g. LDL or VLDL, in a manner which will lower plasma cholesterol is provided that includes assessing the ability of the compd. to form a complex with the lipoprotein, e.g., LDL or VLDL, and then detg. whether the newly formed complex causes a change in the structure of apoB-100 that results in increased binding affinity to the LDL receptor. Also disclosed is a method for lowering cholesterol in a host in need thereof, including a human, that includes the administration of an effective amt. of a compd. which binds to cholesterol-carrying lipoprotein (e.g. LDL or VLDL) in a manner that alters the three dimensional configuration of the lipoprotein and increases the binding affinity of the apoB-100 protein to the LDL receptor, including those on the surface of a hepatic cell.

IT **216167-82-7 216167-84-9 216167-91-8**
216167-93-0 216167-94-1 216167-95-2
216168-35-3 216168-36-4 216168-42-2
268738-49-4
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. to lower plasma cholesterol levels)

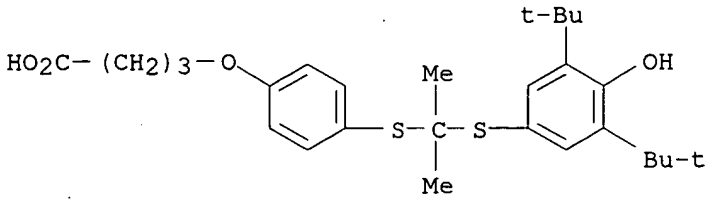
RN 216167-82-7 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)



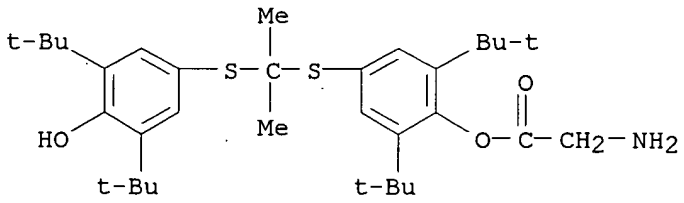
RN 216167-84-9 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenoxy]- (9CI) (CA INDEX NAME)



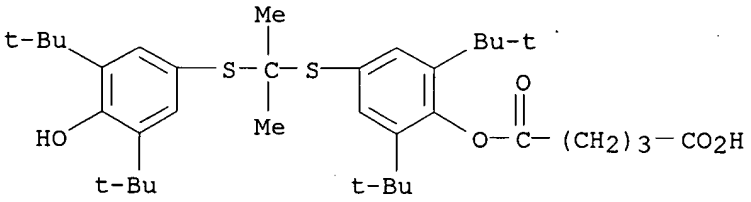
RN 216167-91-8 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]phenoxy]- (9CI) (CA INDEX NAME)



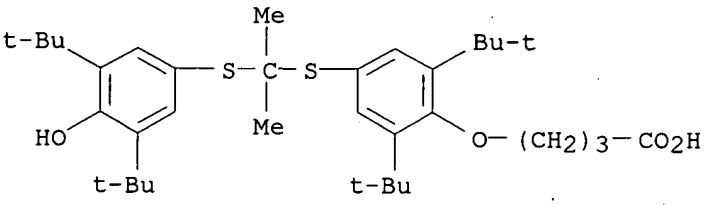
RN 216167-93-0 CAPLUS
CN Glycine, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl ester (9CI) (CA INDEX NAME)



RN 216167-94-1 CAPLUS
CN Pentanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI) (CA INDEX NAME)

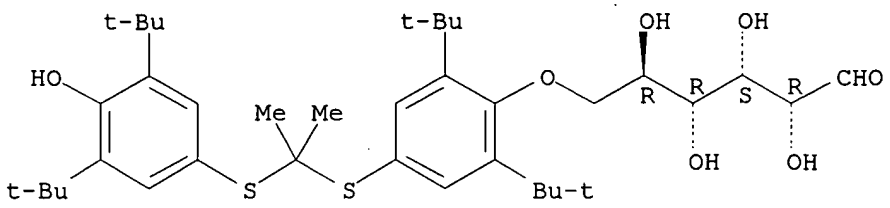


RN 216167-95-2 CAPLUS
CN Butanoic acid, 4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



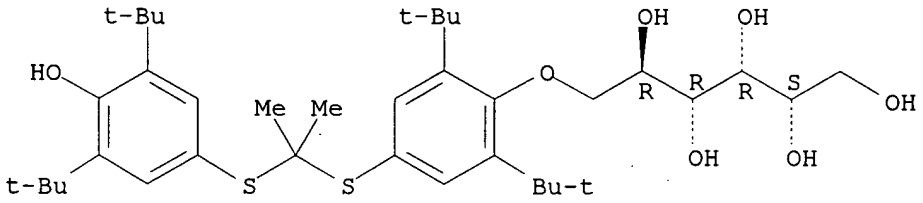
RN 216168-35-3 CAPLUS
CN D-Glucose, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

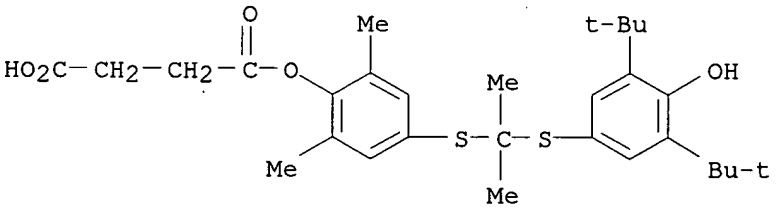


RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

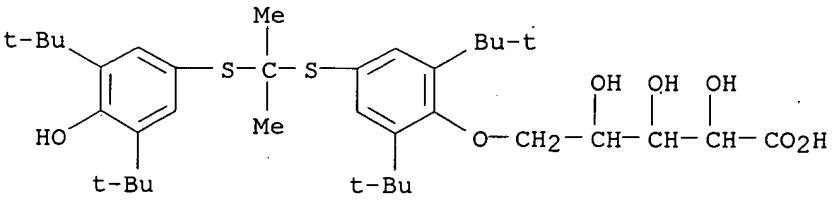
Absolute stereochemistry.



RN 216168-42-2 CAPLUS
CN Butanedioic acid, mono[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-dimethylphenyl] ester (9CI) (CA INDEX NAME)



RN 268738-49-4 CAPLUS
CN Pentonic acid, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)



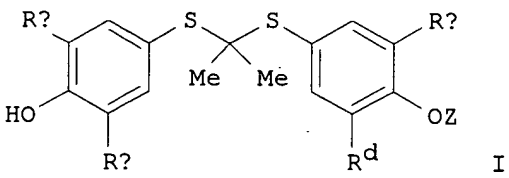
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d ibib abs hitstr 7

L24 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2003 ACS
ACCESSION NUMBER: 2001:713364 CAPLUS
DOCUMENT NUMBER: 135:267271
TITLE: Probucol-related thioketals and thioethers for inhibiting the expression of VCAM-1, preparation, and therapeutic use
INVENTOR(S): Meng, Charles Q.; Hoong, Lee K.; Somers, Patricia K.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 58 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001070757	A2	20010927	WO 2001-US9049	20010321
WO 2001070757	A3	20020314		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1289944	A2	20030312	EP 2001-920617	20010321
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				

PRIORITY APPLN. INFO.: US 2000-191046P P 20000321
WO 2001-US9049 W 20010321
OTHER SOURCE(S): MARPAT 135:267271
GI



I

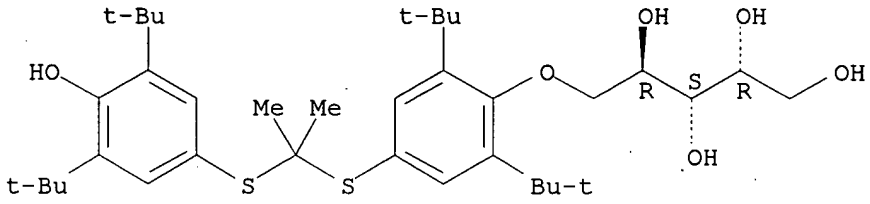
AB Probucol-related thioketals and thioethers are provided that inhibit the expression of VCAM-1, and which can be used in the treatment of VCAM-1-mediated diseases, including inflammatory disorders, cardiovascular diseases, ocular diseases, autoimmune diseases, neurol. disorders, and cancer. Compds. of the invention include I [Ra-Rd = H, (un)substituted alkyl, (un)substituted aryl, etc.; Z = (un)substituted carbohydrate, (un)substituted alditol, (un)substituted C1-10 alkyl terminated by sulfonic acid, etc.]. The compds. also can be used to treat hyperlipidemia and/or hypercholesterolemia. Compd. prepn. is described.

IT **362598-43-4P 362598-44-5P 362598-45-6P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(probucol-related thioketals and thioethers for inhibiting VCAM-1 expression, prepn., and therapeutic use)

RN 362598-43-4 CAPLUS

CN Arabinitol, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

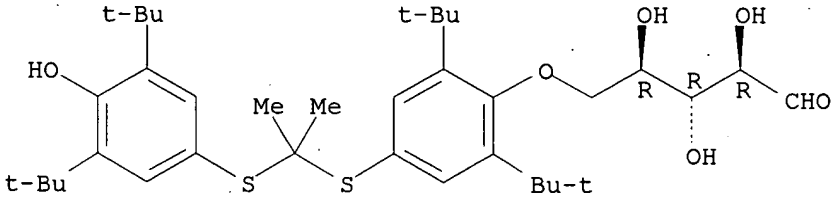
Relative stereochemistry.



RN 362598-44-5 CAPLUS

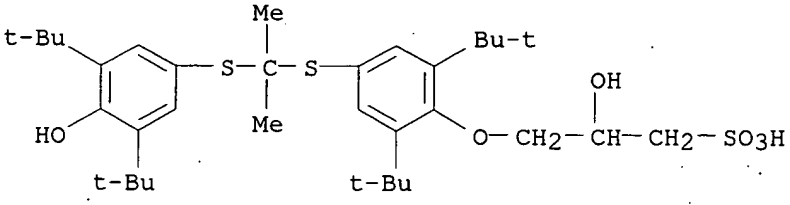
CN D-Ribose, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 362598-45-6 CAPLUS

CN 1-Propanesulfonic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxy- (9CI) (CA INDEX NAME)

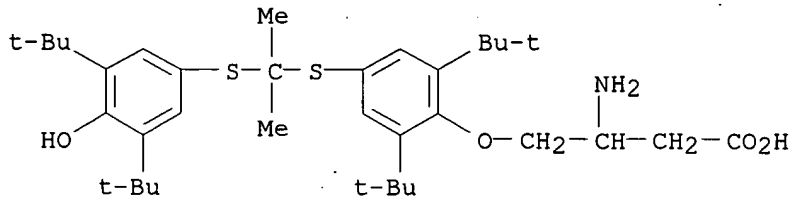


IT **362598-26-3 362598-28-5 362598-30-9**
362598-32-1 362598-34-3 362598-36-5
362598-38-7 362598-40-1 362598-42-3
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(probucol-related thioketals and thioethers for inhibiting VCAM-1 expression, prepn., and therapeutic use)

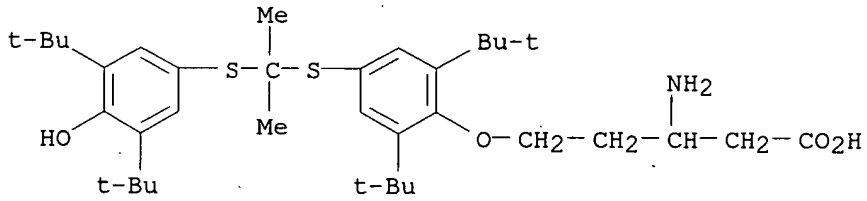
RN 362598-26-3 CAPLUS

CN Butanoic acid, 3-amino-4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



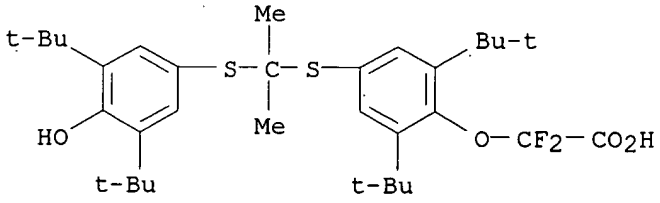
RN 362598-28-5 CAPLUS

CN Pentanoic acid, 3-amino-5-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]- (9CI) (CA INDEX NAME)



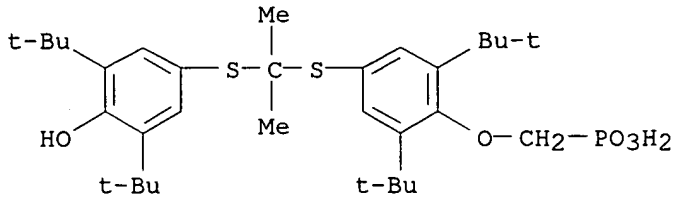
RN 362598-30-9 CAPLUS

CN Acetic acid, [4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]difluoro- (9CI) (CA INDEX NAME)

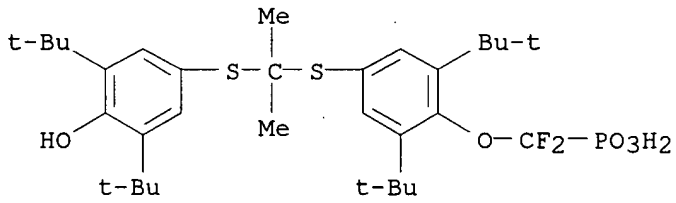


RN 362598-32-1 CAPLUS

CN Phosphonic acid, [[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]- (9CI) (CA INDEX NAME)

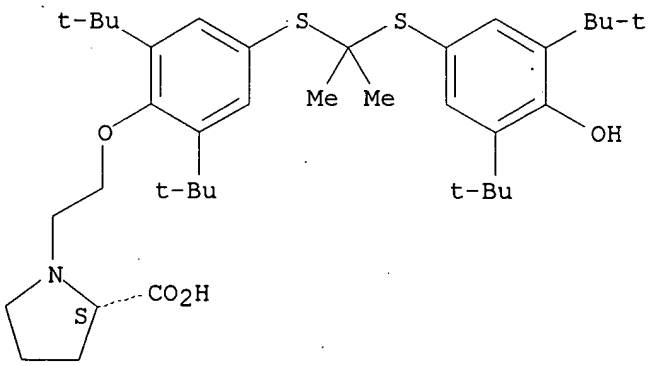


RN 362598-34-3 CAPLUS
CN Phosphonic acid, [[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]difluoromethyl]- (9CI) (CA INDEX NAME)

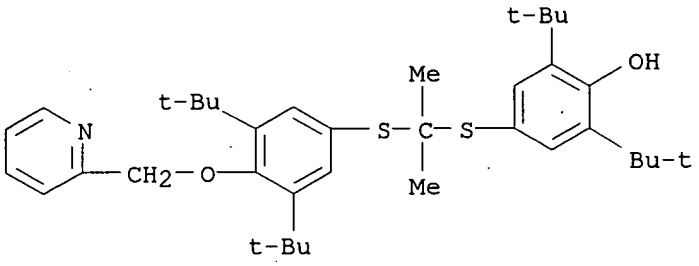


RN 362598-36-5 CAPLUS
CN L-Proline, 1-[2-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]ethyl]- (9CI) (CA INDEX NAME)

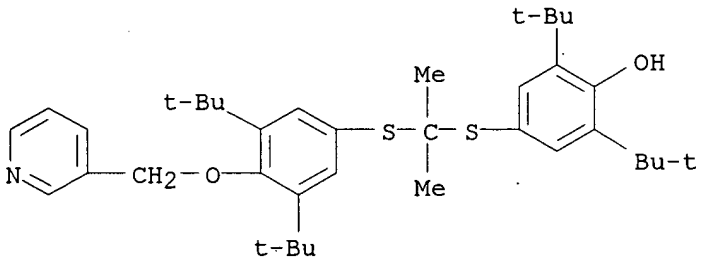
Absolute stereochemistry.



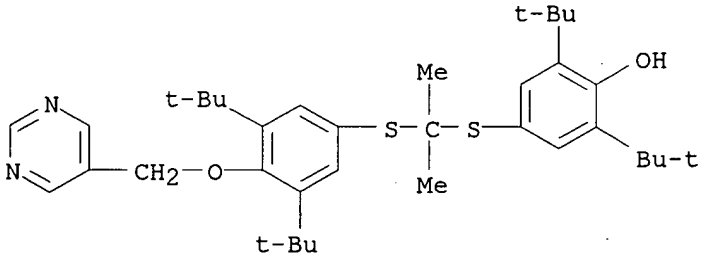
RN 362598-38-7 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(2-pyridinylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



RN 362598-40-1 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(3-pyridinylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



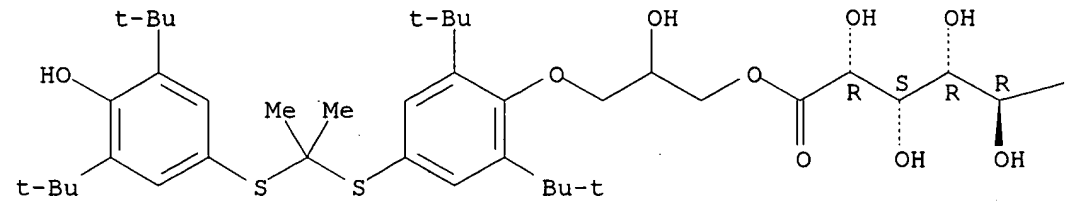
RN 362598-42-3 CAPLUS
CN Phenol, 4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-(5-pyrimidinylmethoxy)phenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)- (9CI) (CA INDEX NAME)



IT **362598-46-7**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(probucol-related thioketals and thioethers for inhibiting VCAM-1 expression, prepn., therapeutic use, and use with other agents)
RN 362598-46-7 CAPLUS
CN D-Gluconic acid, 3-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-2-hydroxypropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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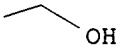

=> file stnguide

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	47.13	425.90
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-5.86	-18.88

FILE 'STNGUIDE' ENTERED AT 11:45:12 ON 25 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE
AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: May 23, 2003 (20030523/UP).

=> d his

(FILE 'HOME' ENTERED AT 11:12:32 ON 25 MAY 2003)

FILE 'REGISTRY' ENTERED AT 11:12:42 ON 25 MAY 2003
L1 STRUCTURE UPLOADED
L2 7 S L1
L3 105 S L1 FULL
L4 0 S C39 H44 F2 O6 S2 . X NA AND L3
L5 1 S C39 H44 F2 O6 S2 . X NA/MF AND L3

FILE 'CAPLUS' ENTERED AT 11:16:19 ON 25 MAY 2003
L6 1 S L5
S L5 AND C37 H60 O7 S2/MF

FILE 'REGISTRY' ENTERED AT 11:18:38 ON 25 MAY 2003
L7 5 S C37 H60 O7 S2/MF

FILE 'CAPLUS' ENTERED AT 11:18:39 ON 25 MAY 2003
L8 6 S L7
L9 0 S L5 AND L8

FILE 'REGISTRY' ENTERED AT 11:18:44 ON 25 MAY 2003

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L10             0 S L5 AND    C37 H60 O7 S2/MF
L11             3 S L3 AND    C37 H60 O7 S2/MF

     FILE 'CAPLUS' ENTERED AT 11:19:21 ON 25 MAY 2003
L12             4 S L11

     FILE 'REGISTRY' ENTERED AT 11:22:09 ON 25 MAY 2003
L13             1 S L3 AND   C36 H58 O4 S2/MF

     FILE 'CAPLUS' ENTERED AT 11:24:33 ON 25 MAY 2003
L14             1 S L13
                  S L3 AND C35 H54 O4 S2/MF

     FILE 'REGISTRY' ENTERED AT 11:25:55 ON 25 MAY 2003
L15             7 S C35 H54 O4 S2/MF

     FILE 'CAPLUS' ENTERED AT 11:25:56 ON 25 MAY 2003
L16             6 S L15
L17             5 S L3 AND L16

     FILE 'REGISTRY' ENTERED AT 11:28:26 ON 25 MAY 2003
L18            14 S  216167-80-5 OR 216167-81-6 OR 216167-82-7 OR    216167-83-8
L19             3 S  216167-82-7 OR  216167-80-5 OR  216167-84-9

     FILE 'CAPLUS' ENTERED AT 11:32:42 ON 25 MAY 2003
L20             9 S L19

     FILE 'REGISTRY' ENTERED AT 11:33:34 ON 25 MAY 2003
L21            11 S 216167-93-0 OR 216167-94-1 OR  216167-95-2 OR   216167-96-3 O

     FILE 'CAPLUS' ENTERED AT 11:37:46 ON 25 MAY 2003
                  S 216167-93-0/REG#

     FILE 'REGISTRY' ENTERED AT 11:38:41 ON 25 MAY 2003
L22             1 S 216167-93-0/RN

     FILE 'CAPLUS' ENTERED AT 11:38:42 ON 25 MAY 2003
L23             3 S L22
L24            14 S L3

     FILE 'STNGUIDE' ENTERED AT 11:45:12 ON 25 MAY 2003

=> file reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.24     426.14

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)      SINCE FILE      TOTAL
                                                   ENTRY    SESSION
CA SUBSCRIBER PRICE                                 0.00     -18.88

FILE 'REGISTRY' ENTERED AT 11:47:47 ON 25 MAY 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   23 MAY 2003  HIGHEST RN 519387-75-8
DICTIONARY FILE UPDATES:  23 MAY 2003  HIGHEST RN 519387-75-8
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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

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=> s l3 and 6-12/o
       3220667 6-12/O
L25          34 L3 AND 6-12/O

=> d scan

L25  34 ANSWERS   REGISTRY  COPYRIGHT 2003 ACS
IN   L-Arginine, N2-[4-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-
     hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]-
     1,4-dioxobutyl]- (9CI)
MF   C41 H64 N4 O6 S2
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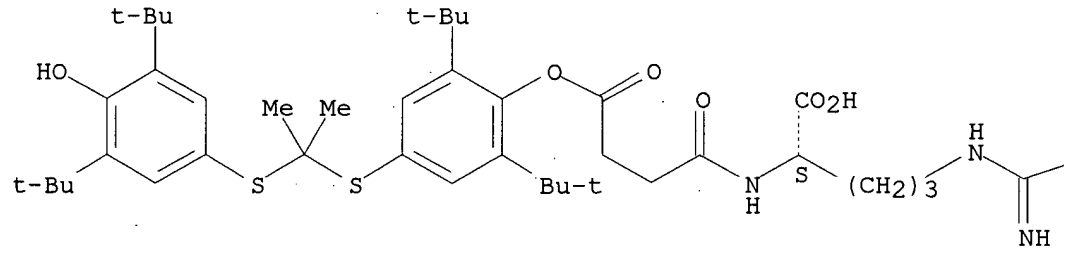
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

NH2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> s l25 not n/els
      14921990 N/ELS
L26          27 L25 NOT N/ELS

=> d scan
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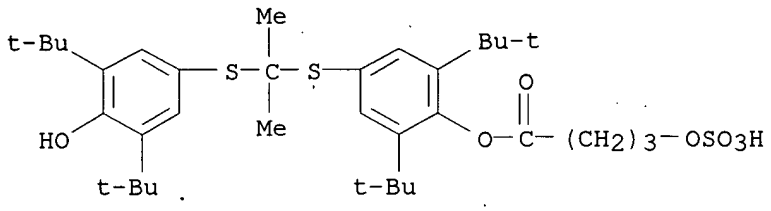
L26 27 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester (9CI)
MF **C35 H54 O7 S3**
CI COM

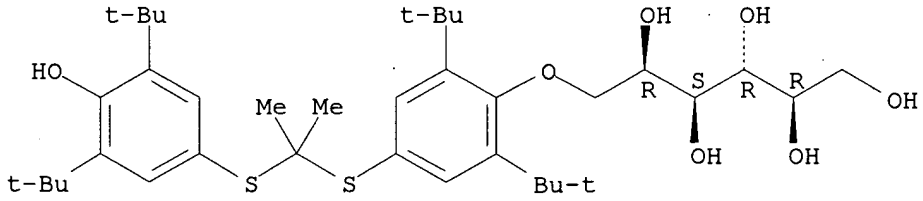


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):10

L26 27 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN D-Altritol, 1-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI)
MF **C37 H60 O7 S2**

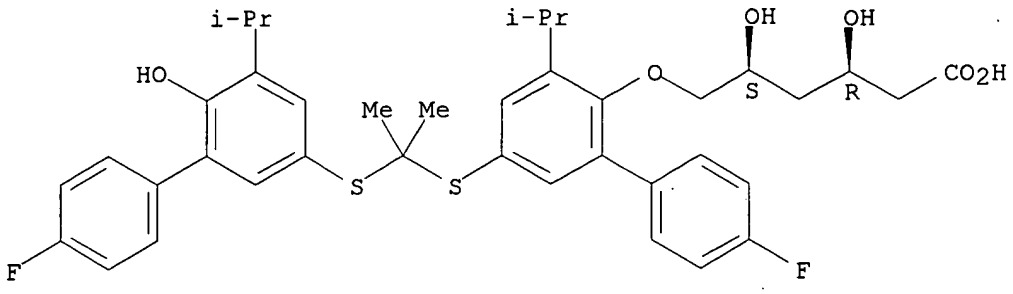
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L26 27 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN D-erythro-Hexonic acid, 2,4-dideoxy-6-O-[4'-fluoro-5-[[1-[[4'-fluoro-6-hydroxy-5-(1-methylethyl)[1,1'-biphenyl]-3-yl]thio]-1-methylethyl]thio]-3-(1-methylethyl)[1,1'-biphenyl]-2-yl]-, sodium salt (9CI)
MF **C39 H44 F2 O6 S2 . x Na**

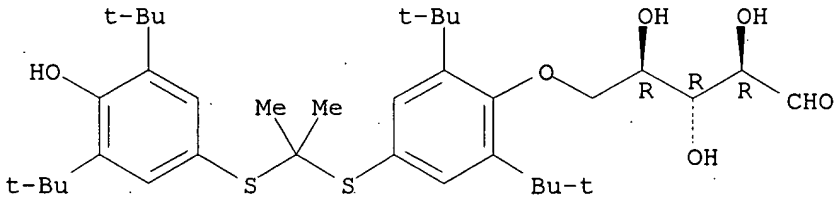
Absolute stereochemistry.



●x Na

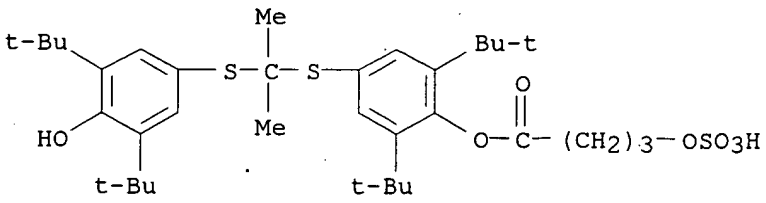
L26 27 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN D-Ribose, 5-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI)
MF **C36 H56 O6 S2**

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L26 27 ANSWERS REGISTRY COPYRIGHT 2003 ACS
IN Butanoic acid, 4-(sulfooxy)-, 1-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl] ester, monosodium salt (9CI)
MF **C35 H54 O7 S3 . Na**



● Na

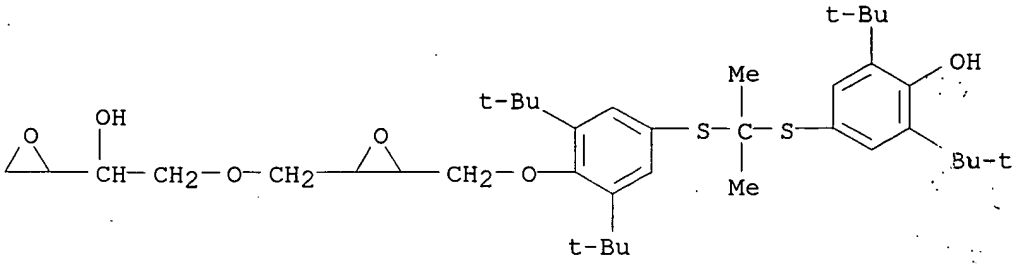
ACCESSION NUMBER: 1998:761875 CAPLUS
DOCUMENT NUMBER: 130:13646
TITLE: Preparation of phenolic compounds for the inhibition of the expression of VCAM-1
INVENTOR(S): Medford, Russell M.; Somers, Patricia K.; Hoong, Lee K.; Meng, Charles Q.
PATENT ASSIGNEE(S): Atherogenics, Inc., USA
SOURCE: PCT Int. Appl., 109 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9851662	A2	19981119	WO 1998-US9781	19980514
WO 9851662	A3	20000302		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9874851	A1	19981208	AU 1998-74851	19980514
AU 750041	B2	20020711		
EP 994853	A2	20000426	EP 1998-922264	19980514
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 6121319	A	20000919	US 1998-78935	19980514
BR 9809819	A	20010918	BR 1998-9819	19980514
JP 2002503227	T2	20020129	JP 1998-549502	19980514
NO 9905544	A	20000110	NO 1999-5544	19991112
MX 9910402	A	20000630	MX 1999-10402	19991112

PRIORITY APPLN. INFO.: US 1997-47020P P 19970514
WO 1998-US9781 W 19980514
OTHER SOURCE(S): MARPAT 130:13646

=> d hitstr 5

L28 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2003 ACS
IT **216167-98-5P 216168-36-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of phenolic compds. for the inhibition of the expression of VCAM-1)
RN 216167-98-5 CAPLUS
CN Oxiranemethanol, .alpha.-[[[3-[[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenoxy]methyl]oxiranyl]methoxy]methyl]- (9CI) (CA INDEX NAME)



RN 216168-36-4 CAPLUS
CN D-Glucitol, 6-O-[4-[[1-[[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]thio]-1-methylethyl]thio]-2,6-bis(1,1-dimethylethyl)phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.